

AMERICAN AGRICULTURIST,

FOR THE

Farm, Garden, and Household.

"AGRICULTURE IS THE MOST HEALTHFUL, MOST USEFUL, AND MOST NOBLE EMPLOYMENT OF MAN."—WASHINGTON.

ORANGE JUDD, A.M.,
EDITOR AND PROPRIETOR.

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American Agriculturist in German.

The AMERICAN AGRICULTURIST is published in both the English and German Languages. Both Editions are of the same size, and contain, as nearly as possible, the same Articles and Illustrations. The German Edition is furnished at the same rates as the English, singly or in clubs. A club may be part English, and part German.



February.

"Where now the vital energy that moved,
While Summer was, the pure and subtle lymph
Through the imperceptible meandering veins
Of leaf and flower? It sleeps; and the icy touch
Of unprolific Winter has impressed
A cold stagnation on the intestine tide.
But let the months go round, a few short months,
And all shall be restored. These naked shoots,
Barren as lances, among which the wind
Makes wintry music, sighing as it goes,
Shall put their graceful foliage on again,
And, more aspiring, and with ampler spread,
Shall boast new charms, and more than they have lost."

The "cold stagnation" of which Cowper thus speaks, is every where manifest. All the plants are taking their winter sleep, from the tallest trees in the forest to the humblest mosses and lichens that flourish in their shade. For nearly half the year they are as torpid as if they were dead. If there is any movement of the vital forces within, it is carefully concealed. The leaves have fallen from the larger trees and shrubs, forming a warm covering for the delicate plants that flourish only in the protection of the forest. Then the snow falls and makes a still further protection, so that the ground in the far north is often frozen no more than in our

own latitude; if the snow comes early, it may not be frozen at all in the deep woods, even in the coldest seasons. If we should remove the snow we would find the winter-green, and prince's pine, the adder's tongue with its purple hues, and its kindred plant the creeping good-yeara with its white veined and netted leaves, and the twinberry with its bright scarlet hues, and a great variety of other humble plants as fresh as in summer. Most men are strangers to the world of beauty that lives and has its being under forest leaves, or but just above them. It is one of the advantages of the passion for Warden cases, which has recently come over our cities and villages that it is bringing to light these lowly dwellers of the retired woods, and secluded swamps. A man may live a life time in the country, and be familiar with the woods without suspecting that there is more than one kind of moss, or of ferns, or of lichens. The mosses have a certain family likeness, but a very slight examination shows as great a variety among them, as among oaks. On almost any dozen acres of our moist woodlands, especially if they are threaded by small rocky streams you may find at least a dozen varieties of the mosses, and as many lichens, with several kinds of ferns. All but the ferns are quite accessible in every mild spell in the winter when the snow and ice melt. Nothing can exceed the delicacy and beauty of some of these mosses. Some are soft and fine as velvet, others of feathery shape, and others still, resemble chased silver. Sometimes the lichens and mosses are found intermingled in the same mass, the lichens sprouting out of the velvet sod like stag horns. The ferns are only to be found by the fallen leaves and stalks of the last season's growth. Nothing can be more charming for the winter parlor than one of these Warden cases tastefully arranged. Hyacinths and crocuses flourish under the glass, but are not essential to its beauty. Almost all plants like those we have mentioned, which grow in the shade, will do well in the Warden case.

While the plants are taking their winter rest we may stop to discuss the bearing of labor upon our prosperity. Adam Smith has well said, "Labor was the first price, the original purchase money, that was paid for all things. It was not by gold, or by silver, but by labor that all the wealth of the world was purchased." The land now divided into farms and owned in fee simple was almost worthless to the aborigines, who drew from it a scanty, precarious subsistence, by a very rude husbandry. They laid up few stores of grain, and were always in peril of starvation. It took thousands of acres to support a single individual. This land has become valuable by the labor that has been bestowed upon it. Our government assumes that its lands are without value, and it surveys them, and gives a title deed with the guarantee of protection for one dollar and a quarter an acre, assuming that will be the cost of its survey and protection. The

land grows valuable to us, just as we bestow skill and labor upon it, up to a certain limit

The wild land is made valuable to the purchaser, when he puts a fence around it. He may then turn in his cattle and exclude those of his neighbor. If he fells the forest, that labor increases the value of the land by enabling it to yield more grass and hay. He can keep more stock and make more butter and cheese for market. If he plow, after the forest stumps are rotted away, he adds another value to the land by making it yield the roots and grains. He can keep still more stock and get a still larger income from his land. If he lay out still more labor and plow an inch or two deeper, he gets still larger crops and puts a higher value upon the land. We get a very fair crop in some parts of the country if the seed is only dropped and covered upon the plowed land. It is improved with once cultivating and hoeing. But some find that a crop of corn pays abundantly for four times cultivating. Not a weed is left to draw upon the strength of the soil, or to scatter its seed and make work for another season. The more stirring of the soil, they say, the more corn. The more labor the more profit.

Then again, if we add to the plowing and tillage the labor of making and applying manure to the land it is found to pay better still. Just how much we may profitably spend in this way no skillful farmer would find it easy to say; it is much beyond any thing now done. Some acres produce twenty bushels of corn, others eighty. The principal difference is in the labor and manure which is only labor in another form. The fees of twenty cows for a year occupy but a small space and will be mainly wasted without care. With labor enough they will make two hundred cords of manure. Apply fifty cords of manure to an acre and it yields astonishing crops, so that all the measures and scales are suspected of lying by farmers of the old school, who are afraid of hiring too much labor. The garden has more labor and manure than the field, and so produces vastly more per acre.

It would not do to lay down as a maxim without qualification, "the more labor the more profit," there must be a limit; but it is far beyond our present practice. It is found to be far more profitable to raise eighty bushels of corn to the acre than forty, or any less number, in the sea-board States where corn is high. One man works two hundred acres with a single hired man and boy, and just gets a living. Another, with no more capital, works the same sized farm with eight men, the year round, with teams to match, and gets rich. He pays the men from the products of their own labor, and saves a profit to himself. His practice furnishes the needed hints as to the direction in which labor should be employed. In our arrangements for the coming season, we need a more generous faith in the capacities of the soil to reward labor.

Calendar of Operations for Feb., 1862.

[A glance over a table like the following will generally call to mind some piece of work that would otherwise be forgotten or neglected. The remarks are more especially adapted to places between 38° to 42°; but will be equally applicable further North and South, by allowing for latitude. —The calendar will, of course, be much more full during the season of active field and garden work.]

Farm.

This month and the following are the most critical for all kinds of domestic animals, and the stock farmer has enough to occupy his time even though winter reigns in full rigor through the whole of February. The long evenings invite to sociability and neighborly intercourse, and the approaching summer campaign affords a topic for discussion among farmers when they meet. February is the month of all others for Farmers' Clubs to be most useful and attractive. There are grafts and seeds to exchange, and we are beginning the year with the business of 1861 well settled, and out of mind.

Buildings—Keep water out of foundation walls, and thus protect them against the effects of frost, and be always guarded against high winds and sudden changes.

Cattle need a change of diet; manage to let them have it. Look to their comfort most carefully. Cows coming in must be dried off certainly one or two weeks before the new milk springs; feed them generously, not with heating food; roots should form part of their diet. Working cattle ought to have a respite from hard work now if possible, so as to be ready for the labors of the spring; let them lay on a little fat, and keep the skins of all neat stock healthy by currying. Look out for lice, especially on young stock. Do not hold on to beef cattle after they can be sold at a fair price.

Cellars—Look well to the vegetables and remove all decaying ones, "sprouting" the potatoes if necessary. Do not feed decayed cabbages or turnips to milch cows, it will surely flavor the milk.

Corn land of the last season may be cleared of the stubble or stalks while the ground is frozen; at least break off the stubble close to the ground to facilitate plowing.

Drains and ditches—Clear surface drains of ice and other obstructions. See that when the snow thaws, the overflow from drains or ditches does not wash the soil away; and prevent surface water working holes down to the tiles in newly laid tile drains. Protect the outlets from rats and mice.

Fencing—Follow advice given last month and plan for dispensing with as much as you can; have as little as possible, but have it all good.

Fields of grain and grass are invariably injured by cattle and sheep ranging over them in winter, and the temptation to allow it is strongest during February.

Grain—See Calendar for January.

Hired Men—Farm hands should be engaged early. The best find places soonest.

Horses, and mule teams, must be kept well shod and sharp. If a horse breaks his leg you can't "beef" him. Breeding mares should not leave the stable in very icy weather. Devote some time daily to colts of a suitable age for breaking.

Hogs should be kept hard at work upon the manure in barn cellars if possible, otherwise secure them warm quarters and feed them so as to keep them growing and healthy. Do not let the troughs fill up with frozen swill. Breeding sows should be kept separate and have warm retired nests, where they can be easily got at. Feed raw sliced roots occasionally; it prevents constipation and the tendency to devour their young.

Ice—Quick, or it will be gone; it is seldom worth much for storing after the 10th of February.

Manures—Fine composts, with soil, head lands, or muck, well incorporated, may be hauled to the field while the ground is frozen. See that all sorts are well mixed and composted as it accumulates. Keep frost out of the manure heaps if practicable.

Maple Sugar—Prepare to make all possible, and be ready for the first flow of sap—this is the sweetest. See article on page 42.

Potatoes for Seed—Keep where they will not sprout; but do not rub the sprouts off.

Poultry—Whitewash the poultry house and grease the roosts. Change the old nests, and encourage laying by feeding beef scraps or bits of meat from the table.

Sheep must not be allowed to fall off in condition.—They will relish hemlock branches and they are good food for them in unlimited quantities. Feed breeding ewes a quart of sliced raw potatoes with a very little meal upon them, daily. Never let sheep lack water or salt—and above all feed regularly.

Tools—Provide a good supply for spring work, while you have means to buy and to select them at leisure.

Orchard and Nursery.

Little can be done in this department until the ground is in order for transplanting. The earlier that can be done, the better. Thousands of trees are yearly destroyed by too early swelling of the buds, which are killed by succeeding frosts. Small trees (as peach trees and apricots) may be protected by pine and hemlock boughs tied in among their branches and by stamping snow down about their roots—applicable only on a small scale.

If trees are frozen after being taken from the ground, bury them tops and all; they will sustain less injury if thawed gradually. Make things ready for spring work.

Clons will soon be needed. Procure only choicest kinds, cut on mild days when not frozen. Label each sort distinctly, and keep in sand in the cellar.

Insects of some kinds are more readily destroyed now than later in the season. Scrape trunks and main limbs of trees infested with bark-lice, and scrub with lye.

Manure—Draw out and spread under the trees, at least as far as the branches extend in orchards or level grounds.

Orchards do not need manure every year. Apply unleached ashes or fresh slacked lime when the frost is leaving the soil, not before. Pear trees love ashes.

Pruning—It is best to abstain even from *knife* pruning as we approach the time for sap to start. Many prune now to the great injury of the orchards. Dwarf pears, however, may be pruned without danger.

Snow—Be always watchful in case of snow and ice storms, and support the branches in danger of injury before it splits them down.

Stakes, labels, tallies, packing bags, mats, etc.—Be sure to have prepared, before hand, all that you will need for spring use during the season of nursery planting or sales.

Varieties to plant or graft—Give up old foggy notions, and study well and adopt the best varieties of all kinds of fruit and ornamental trees. A nurseryman who gets behind hand stays behind hand in this respect.

Kitchen and Fruit Garden.

Every thing that may in the least forward spring work in the kitchen or market garden, should be done, and as the busy time approaches many things will occur to the mind which should be made a note of. No novice should attempt very early forcing vegetables for market, but to succeed well, he should grow into the practice after a year or two, beginning a little earlier each year.

Cold Frames—Admit air during mild weather, and watch against dampness and decay. Guard against sudden freezing. Spread over them mats or straw, when unprotected by a covering of snow.

Cuttings of Currants, Gooseberries, etc., may be made whenever the wood is not frozen, but better in the Fall.

Fences—Repair old, and make all hen proof. Provide proper fastenings for gates.

Grape Vines—Prune at once, if not done in the Fall.

Manure—A garden can hardly have too much; it should be finely divided and intimately mixed with the soil. For fruit trees, leaves, or sawdust saturated with urine is an excellent application. For the garden rich composts of all kinds, particularly night soil, hen dung, etc., with fine stall manure and muck, are excellent.

Prune Currants and Gooseberries and clean out the old stalks from Raspberries if neglected until now; cuttings of the two former will grow if kept till spring.

Rhubarb in open ground can be hastened by covering with horse manure now, later with a headless barrel.

Seeds—Examine the list for free distribution from this office, printed on a subsequent page, and select new or favorite kinds. Procure and study catalogues of reliable seedsmen whose advertisements appear in the appropriate department. Test samples before purchasing largely. They are best proved by mixing with a little sandy soil and keeping them in very small pots under a glass.

Stakes—Prepare a good supply and soak them in a weak solution of blue vitriol in water.

Tools—There are always new and improved kinds claiming attention. Put the old stock in good order.

Flower Garden and Lawn.

Do not think there is nothing to do in the flower garden; on the lawn there is in fact little, save to keep an eye to the shrubbery and evergreens, and see that high winds and heavy snow and ice storms do no harm, but in the garden, look to the

Borders—Winds will tear away the protection about many half hardy plants, and it must be replaced. The fowls, if they have the range of the place as usual, will scratch off the mulch over the crocus, hyacinth and tulip beds, perhaps exposing the bulbs even. It does no special harm if the mulch be at once thrown back again.

Christmas greens, when taken down are very handy to give a little additional protection wherever needed.

Cold Frames—Give treatment elsewhere advised.

Cuttings may be taken; prune and trim hardy shrubs.

Frost most commonly does its damage to vegetation in February. The best shield is protection against the morning and midday sun on warm spring like days.

Hot-Beds may be made for seed of early flowers, to hasten their blooming period, and to start cuttings. Many plants will strike in a hot-bed with a moderate heat, which could hardly be made to grow in the open ground.

Roses—Begin pruning in mild weather.

Transplanting and shifting roots of perennials, etc., should be done just as soon as the frost is out of the ground. The earlier the better.

Trellises and Arbors—Provide for vines and trailing plants. Repair all needing it and paint while the ground is covered with snow and no dust is flying.

Green-House.

The directions of last month suffice for this in the main. The great art in managing a green-house is to keep the temperature low but never too low, and to keep down insects. Bring plants beginning to grow or showing for bloom close to the light.

Cuttings of many of the woody plants may now be made and potted. They strike better if taken to hot-house.

Prune into shape any plants needing it, before a new growth begins or flower buds form, and remove all decaying branches, dead leaves, weeds, and moss, keeping every thing neat and clean.

Repotting will claim a full share of the manager's time this month, if the collection is large. Many of the plants may now be carried to the forcing apartments to hasten the blooming period.

Roses—Attend to grafted stock, or graft if not done.

Water—Increase the amount as the plants push into growth, but avoid an excess.

Hot-House and Conservatory.

In the conservatory follow directions given last month. In the hot-house maintain 70° to 80° of heat. If snow falls, the roof should be cleared to admit the light which the rapidly growing plants now require. Air must be given the plants frequently, but much care will be needed to prevent chilling drafts striking directly upon the plants. Maintain a constantly moist air by sprinkling freely.

Annuals—Seeds of many of the out-door annuals may now be sown in pots. They will form good sized plants for decorating the border early in the season.

Azaleas, now in bloom, should be watered freely. Avoid syringing after they are in full bloom.

Bedding Plants—Layer or insert cuttings of Petunias, Pelargoniums, Verbenas, Dianthus, Candytuft, Pansies, Dicentras, Daisies, etc., for early planting in open borders.

Bulbs—The early forcings should now be in bloom, and others in a good degree of forwardness. Bring a fresh collection from the green-house, every two weeks.

Camellias—Look out for red spider; if affected, wash each leaf with a sponge and soft water, and syringe with water containing flour of sulphur.

Insects—Fumigate with tobacco, destroy any which have established themselves, and wash with soap suds.

Repotting—Many rapid growing plants require pots of a larger size. Keep potting soil at all times in readiness.

Grapery and Orchard-House.

Cold graperies and orchard houses will need no more attention than last month, until the weather becomes decidedly warm and spring like, which seldom occurs north of latitude 41°, before March. The vines should then be lifted, and tied to the rafters, and the borders watered with liquid manure. In houses to be brought forward by moderate heat, do the same and maintain a temperature not much above 50°, in the day and ten degrees lower at night. Water sparingly with liquid manure. When growth begins vigorously, follow up with careful pinching-in, and occasional sprinkling. Keep a moist atmosphere particularly on warm days by sprinkling the floors and walls. Compare directions given last month.

Apiary in February.

Prepared by M. Quinby—by request.

There is yet some danger that steady cold weather will close the air passages with frost, dead bees, etc. A day or two of severe weather will not effect much, but when protracted to a week or two, the bees will need attention.

In times of mild weather, sweep out clean under the bees. If the stands of any hives are to be changed, it should be done before the bees fly out and mark their locality. Should they be moved but a short distance, the importance of doing it now, is much more. Have a separate stand for each hive, instead of a long bench for all. You can then give some five or six feet space to each, without vacant room on the plank. If a bee-house is to be used the coming season, it should be ready now to put in the hives. Bee houses can be very ornamental, yet they are not always the most profitable places, in which to keep bees. A bee-house would do very well, even with the hives crowded together as they usually are, if all the new colonies introduced could be provided with a fertile queen, and no swarming allowed, as then there would be but little danger of her issuing to meet the drone, and getting destroyed by entering the wrong hive on her return. This process will soon become familiar to those who introduce the Italian bee into their apiaries.

All who intend to Italianize their bees the coming season, should make their preparations now, and not wait until attention to spring work leaves no time to think how it should be done. Any of the movable comb hives are so much superior to the common box, for changing bees from the native to the Italian, that I can not imagine how a person can feel satisfied to be without one. The bees, comb, and honey, can be transferred from the box to the movable frame hive, early in Spring. To rear the queens you must enclose a few bees with a small piece of comb containing young larvae or eggs. A suitable piece of comb can not be cut from a large sheet without destroying much of the brood, and the few bees generally taken for this purpose, need something much smaller than the ordinary hive. To have the operation work smoothly, you want a special arrangement, something like the following: Get the size of one of the large frames inside; make a number of small frames that will just fill it. Have them as near four inches square as the shape and size of the large one will admit. If operations are to begin early, fit a piece of clean worker comb into each small frame. Fasten them into the large frame, with wire, or strips of tin, or something easily removed, as it will often be desirable to take out a large frame and remove a small one without disturbing the bees that happen to be attached. This frame thus prepared is introduced into a colony where there is an Italian queen, a few days before brood is wanted. A miniature hive that will hold three or more of these small frames will be needed. It should be so arranged that it may be easily examined at all times. These little colonies are not so irritable as larger ones, and afford a much better opportunity of studying the most interesting points of natural history. If these boxes are to be painted, it should be some light color, and should be put on immediately, that the odor of new paint may in some measure pass off before using. Particular directions for rearing queens and introducing them, will be given at the proper season.

Exhibition Tables at the Office of the American Agriculturist.

The following have been exhibited since last report:

VEGETABLES.—Chinese Potatoes, 2 years old and fine, grown in sandy loam, by Mr. Downing, Newburg, N. Y. Sample of Sorghum, J. N. Carr, Philo, Champaign Co., Ill. Variegated Corn, Mr. Wilson, N. Y. Collection of Corn, W. S. Carpenter, Rye, N. Y. Ironquils Corn, Mr. Wilson. Collection of Corn, J. M. Thornburn & Co., N. Y. Improved King Philip Corn, from seed from the *American Agriculturist*, fine, C. E. Wheeler, Bergen, N. J. Hubbard Squash, weight $2\frac{1}{2}$ lbs., the finest specimen we have seen, E. Williams, West Bloomfield, N. J. Specimen of Corn, from the same.

FRUITS.—Seedling Winter Pears, very fine, A. M. Halsted, Rye, N. Y. Collection of Apples, E. Williams, West Bloomfield, N. J. Newtown Pippin Apples, of 1860, kept remarkably well, somewhat deteriorated in flavor, Robert Benner, Esq., Astoria. Cider from Iron Apples, (so termed from their hardness), delicious, G. M. Usher, Staten Island, N. Y. Collection of Apples, G. M. Usher, as above.

MISCELLANEOUS.—Mole Trap, Micajah T. Johnson, Short Creek, Harrison Co., O. Collection of Brazilian seeds, Mr. Roberts, N. Y. Specimen of Anatto, T. W. R., from Jamaica, W. L. Seeds, from Geo. Latimer, Esq., St. Johns, Porto Rico, W. L. Horner's Nest, Mr. Paltham, New Utrecht, L. I. Sorghum Molasses, E. A. Van Meter, Washington, Ill. A piece of the floor on which Col. Ellsworth fell, Mr. Frederick, Alexandria, Va. A Bouquet of skeletonized flowers, leaves, seeds and capsules, in a glass case, one of the most beautiful and natural parlor ornaments extant, W. F. Heins, Woodstock, N. Y. Wasps' nest, W. F. Heins, Woodstock, N. Y. Sorghum Molasses, fine, John Manwaring, Mendota, La Salle Co., Ill.

CURIOSITIES.—Briar, from which briar wood pipes are made, Jas. T. Sample, Allegheny City, Pa., Suttler to the Round Head Regiment. Bark of the Palmetto Tree, brought by Jas. T. Sample, from Port Royal, S. C.

Seeds for Free Distribution to all Subscribers for 1862 (Vol. 21.).

Every subscriber to the *Agriculturist* for 1862, is invited to select **four or five parcels** of seeds from the list below.

These seeds are all valuable. Of the 90 kinds offered, many are new varieties, but we include some common useful sorts for convenience of those without access to good seeds.

Most of them are annuals (reproducing seed the first season), and in all cases there will be enough to yield a good supply for future use. Our aim is, to furnish the germs of future abundance in each locality where these seeds go.

Many of these seeds were grown by ourselves, the past year; the others are obtained of the best growers here and in Europe. The distribution will begin the last of February.

Mode of Distribution.—The seeds may be called for at the office after Feb. 25, or be applied for by mail at any time now, to be forwarded when ready. The postage is only **1 cent per ounce under 1500 miles; and 2 cents per ounce when over 1500 miles.**

Those sending for seeds to be forwarded by mail, will please carefully observe the following

DIRECTIONS.—(1). Select from the list below, any four or five parcels desired, and write plainly on a slip of paper the numbers (only) of the kinds of seeds wanted. (These numbers are used on our seed drawers, seed bags, etc.)

(2) Enclose the slip in a prepared envelope—directed in full to your own address, as here shown, and put upon it postage stamps to the amount of **one cent for each ounce of seeds to be enclosed, if to go under 1500 miles, or two cents if to go over 1500 miles.** (Most places West of the Mississippi river are over 1500 miles.) **N.B.**—The total amount of stamps required can be reckoned from the table of seeds below. Any fraction over even ounces will need an extra 1c. or two 1-cent stamps according to distance. Forward the above prepared envelopes to this office, and the seeds will be enclosed according to the numbers on the enclosed slip. To save letter postage, let there be **no marks on the envelopes** except the address and stamps. About 2 ounces will go in a common sized envelope.

Field, and Vegetable Garden Seeds.

No.	Weight of package.
185—Mammoth Long Bearded Spring Wheat.....	One ounce.
9—Improved King Philip Corn.....	One or two ounces.
141—Darling's Early Sweet Corn.....	About one ounce.
186—Evergreen Sweet Corn.....	About one ounce.
98—Long Red Mangel Wurzel.....	About one ounce.
187—Conn. Broad Leaf Tobacco.....	About one-eighth ounce.
188—Gautier Havana Tobacco.....	About one-eighth ounce.
191—Mammoth Millet.....	About one-half ounce.
189—Speltz or German Wheat.....	About one ounce.
190—Nepaul Barley.....	About one ounce.
8—Daniel O'Rourke Pea.....	About one ounce.
9—Champion of England Pea.....	About one ounce.
99—Prince Albert Pea.....	About one ounce.
12—Green Kohl Rabi.....	About one-fourth ounce.
13—Enfield Market Cabbage.....	About one-fourth ounce.
145—Flat Dutch (Winter) Cabbage.....	About one-fourth ounce.
192—Improved Silesian Cabbage.....	About one-fourth ounce.
199—Red Dutch Cabbage.....	About one-fourth ounce.
64—Extra early Round Turnip Radish.....	one-fourth ounce.
150—Early Paris Cauliflower.....	About one-eighth ounce.
147—Neapolitan Cabbage Lettuce.....	About one-fourth ounce.
72—Imported Brussels Sprouts.....	About one-eighth ounce.
101—Improved Long Orange Carrot.....	About one-half ounce.
148—Long dark Blood Beet.....	About one-half ounce.
149—Extra early Bassano Beet.....	About one-half ounce.
65—Hubbard Squash, pure.....	About one-fourth ounce.
103—Fejee & Italian Red Tomato.....	About one-eighth ounce.
154—Ice-cream Water Melon.....	About one-eighth ounce.
76—Skillman's Netted Muskmelon.....	About one-eighth ounce.
104—Hollow Crown Parsnip.....	About one-fourth ounce.
66—Extra Curled Parsley.....	About one-fourth ounce.
151—Yellow Danvers Onion.....	About one-fourth ounce.
153—Fine Large Cheese Pumpkin.....	About one-fourth ounce.
17—Red Strap-Leaf Turnip.....	About one-fourth ounce.
71—Long White French Turnip.....	About one-half ounce.
195—Early Short Horn Carrot.....	About one-fourth ounce.
74—Solid White Celery.....	About one-eighth ounce.
103—Sage.....	About one-eighth ounce.
156—Summer Savory.....	About one-eighth ounce.
157—Long Prickly Cucumber.....	About one-eighth ounce.
196—Green Curled Kale.....	About one-fourth ounce.
198—Improved Purple Egg Plant.....	About one-eighth ounce.
31—Winter Cherry.....	About one-eighth ounce.
197—Linneus Rhubarb.....	About one-half ounce.

Flower and Ornamental Seeds.

89—Cotton Plant (2 kinds, mixed).....	One-half ounce.
111—Castor Oil Bean.....	One-half ounce.
On an average any five of the following varieties will go under one 1-cent stamp, (or two stamps if over 1500 miles.)	
200—Fancy Gourds, (mixed).....	312—Fine Sweet Peas, (Aa) varieties, (Aa)*
201—Scarlet Chinese Egg Plant, (Aa).....	124—Whitavia, (Aa)
202—Animated Oats, (Aa).....	49—Candytuft, (Aa)
177—Gracful Quaking Grass, (Aa).....	123—Gilia nivalis, (Aa)
23—Mignonette, (Aa).....	182—Sweet Alyssum, (Aa)
25—Mix'd Nasturtium, (Aa).....	169—Clarkia pulchella, (Aa)
31—Chinese Pink, (Aa).....	175—Mixed Salpiglossis, (Aa)
32—Portulacas Mix'd, (Aa).....	168—Swan River Daisy, (Aa)
51—Phlox Drummondii, (Aa).....	50—Mixed Schizanthus, (Aa)
30—Tassel Flower, (Aa).....	40—Eschscholtzia Californica, (Aa)
37—Beautiful Zinnias, (Mix'd) (Aa).....	313—Xeranthemum Annum (Aa)
203—Mix'd German Poppy, (Aa).....	196—Long tubed Centranthus, (Aa)
204—Mix'd French Poppy, (Aa).....	180—Aucrochlinum Roseum, (Aa)
205—Double French Marigold, (Aa).....	314—Balloon Vine, (Aa)
183—Fine Mix'd German Asters, (Aa).....	37—Cockscomb, (Aa)
206—Golden Straw Flower, (everlasting) (Aa).....	33—Cypress Vine, (Aa)
209—Crimson Globe Amaranth, (everlasting) (Aa).....	207—Rhodanthus Manglestii, (everlasting) (Aa)
210—Convolvulus Tricolor, (Aa).....	122—Mixed Canterbury Bells, (Aa)
173—Mixed Larkspur, (Aa).....	195—Strand Cypress, (Aa)
167—Malope Grandiflora, (Aa).....	42—Foxglove, (Aa)
31—Fine Mixed Lupins, (Aa).....	209—Dw't Blue Larkspur, (Aa)
	171—Forget-Me-not, (Aa)
	315—Eccremocarpus Vine, (Aa)

* (Aa) hardy annual; (AaA) half hardy annual; (Aa) tender annual; (AaB) half hardy biennial; (B) tender biennial; (AaP) hardy perennial; (AaP) half hardy perennial; (AaP) tender perennial.



Containing a great variety of Items, including many good Hints and Suggestions which we give here in small type and condensed form, for want of space elsewhere.

"All in a Heap."—To Correspondents.—This being a general time for renewing subscriptions, it very naturally happens that our readers embrace the occasion to send in their favors—articles, items, queries, etc.; they come "all in a heap." We have not the slightest fault to find with this—but return thanks for the numerous letters. We simply refer to the matter to shield ourselves from any suspicion of want of attention or courtesy, at this our busiest season, if we are less prompt in referring to all letters that come, than might be looked for, without this explanation.

Please Condense.—To some sixty persons, more or less, who have recently sent in from 5 to 30 pages of manuscript, on a variety of topics, most of them offered for sale, we must say one word. Please condense more. We have no time to even read through an article that occupies a page in giving only one idea. There is a single item of not over 20 lines in this (February) number, which contains the essence (every useful thought, and hint,) of all that came in a manuscript of nine foolscap pages! There are only 33 pages in each paper, all told, and we desire to condense a great deal into them. A RULE: Any article designed for publication in the *Agriculturist*, and containing a certain amount of information, is valuable just in proportion to the smallness of the space it occupies, provided its statements be clear, with all needed particulars to make it complete.

Our War Maps appear to have given general gratification, judging from the very numerous references to them in letters received. The containing armies have been nearly quiet since our last—they are apparently gathering up their strength for a terrible conflict, or series of conflicts. We are in doubt as to what point will next come out prominently enough to need illustration, and therefore send this number to press without new maps—having already fully illustrated Missouri, Kentucky, part of Tennessee, Eastern Virginia, Port Royal, Tybee Island, Ferdinandina, and New-Orleans, in our last three issues.—P. S. As we close up these pages, (Saturday, Jan. 18), the reports are, that stirring events may be looked for on and near the Eastern coast of North Carolina and Southeastern Virginia, and we will therefore give, on page 60, a map of that region.—2nd P. S. Jan. 20.—The telegraph says there has been a great battle at Somerset, Ky., resulting in the defeat and death of Gen. Zollicoffer. Somerset is 85 miles Southeast of Frankfort. This, and all other principal towns in Kentucky and in Northern Tennessee, are fully shown in the *Agriculturist* maps, given in November and January.

Boys on Farms.—In response to our inquiry in the January *Agriculturist* we have a number of letters from reliable men and excellent farmers. These can be consulted at this Office.

Linneus Rhubarb Seed, Worth Trying.—As announced in last volume, we have a large quantity of very fine pure seed, gathered by ourselves last Autumn, for our Seed Distribution, (No. 197). The Linneus is the best variety, and though the seed is not certain to reproduce exactly the same variety, it will be most likely to furnish many plants quite equal to the original. Every family that can not obtain the pure roots, and thus save a year or so in time, should sow the seed. It will be especially valuable at the West, and other points distant from reliable commercial gardens or nurseries. Time will be gained by starting the seed in a hot-bed and transplanting the first of May to a rich garden soil, and pushing the plants forward by occasional waterings with liquid manure. They will afford considerable picking the next year, and only the plants proving best may then be preserved, to be multiplied as desired, by dividing the roots. In the absence of a hot-bed, sow early in the open ground, in a sheltered place. Make the soil very rich with stable manure, and treat as above directed for hot-bed plants.

Death of a Royal Patron of Agriculture and Horticulture.—Since our last issue, the sad intelligence has come of the death of the Royal Consort of the Queen of England, Prince Albert. While occupying so high a position, he ever justly considered that he could render the greatest service to his people by

fostering in them a love for rural occupations. This he did not by advice alone, but by example. His farm, his stock, and his garden, cultivated under his own eye and direction were models to be imitated. He thought it not unbecoming to serve as an active officer in both the Royal or National Agricultural and Horticultural Societies of England. To the Presidency of the former Society he was elected the past year, and he held a similar office in the latter Society for two or three years past. Since his death the Queen has requested that the Horticultural Gardens should be considered under her peculiar and personal patronage—a touching mark of respect for her deceased Consort. We are glad to know that prior to his death, Prince Albert exerted his utmost influence to quell the senseless clamor for war with America, and counseled peace with a great agricultural people to whom he was attached by kindred tastes, and national courtesy. We regard with pleasure the banner which was suspended across the street in front of the *Agriculturist* Office, on the occasion of the visit of the Prince of Wales, on which is inscribed, "WELCOME TO THE SON OF ENGLAND'S NOBLEST PATRON OF AGRICULTURE." We had hoped during the coming Summer to in person pay our respects to the father, and examine for ourselves the farm and garden under his supervision. But that can not now be.

Training the Currant.—D. S. Yes, it can be trained, and to good advantage. You may let it grow up into a scrubby bush, with a dozen stems from the ground; but in that case, you must make a desperate effort every other spring, and cut out the old wood. It is preferable to make a miniature tree of each plant, and trim and shape it like a handsome pear-tree. Or, if you want variety, you may train it on a frame or trellis, spreading out, and about three feet high. By the last two methods, you will get larger, handsomer fruit.

Apples from Seed.—H. Grundy, Macoupin Co., Ill. Apple seeds will not produce the same varieties as planted. Seeds from good sorts are most likely to yield good apples.

Dwarf Apple Trees.—The Country Gentleman recommends planting dwarfs on the Doucain stock 8 feet apart, and 6 feet on the still smaller Paradise stock, for garden culture. The latter will yield crops the second, and the former the third year from planting. Among the varieties most suitable for dwarfs are: Red Astrachan, Jersey Sweet, Porter, Baldwin, Dyer, Summer Rose, Benoni, Sweet Bough, Northern Spy, Twenty Ounce, Wagner, Early Strawberry, Fameuse, Canada Red, etc. All the above will need more or less pruning either in the top or side branches to preserve a good shape.

Packing Grapes, Peaches, etc.—An English gardener who sends grapes and other tender fruit long distances, first covers the bottom of the boxes with wheat bran, then a layer of fruit carefully wrapped in soft paper, sifting in bran to fill the crevices, shaking the boxes a little and repeating this until the box is filled. Fruit packed in this way is said to bear long carriage without even losing the "bloom," which is most important as its presence is proof of careful handling.

Winter Pears.—"Central New-York."—Winter pears are not "a humbug." They often fail, but with proper care, will generally succeed. The fruit should be as well ripened as possible before gathering; therefore let it hang on the tree until just before hard frosts; then pick on a dry day, put in boxes or barrels in a cold cellar, and cover tightly. When the proper period for the ripening of each comes, take them from the cellar and put them in a warm closet, say ranging from 60° to 70°. Keep in the dark, and they will slowly color up and become tender and juicy. As we write, the fine flavor of a Winter Nells is on our tongue. Among the best sorts, we name: the Lawrence, Winter Nells, Easter Beurre, Passe Colmar, Beurre d'Arenburg, and Vicar of Winkfield. Beurre d'Anjou ripening in November, is first-rate.

Varieties of Pears for an Orchard.—"Subscriber," in Tlaga Co., N. Y., asks what varieties of standard and dwarf pears we would advise planting for market; use, ripening early and late, on 3 acres of land, setting the standards 20 feet apart, with dwarfs between them. This will take about 325 standards, and about three times as many dwarfs, or 975, planting them between the standards each way, and setting a tree in the centre between each four standards. For the standards we would plant 10 each of Tyson, Madelaine, Beurre Superfin and Winter Nells; 20 each of Rostlezer and Beurre Giffard; 25 Fondante d'Automne; 30 each of Lawrence and Beurre Clairgeau; 58 Flemish Beauty, and 100 Bartlett. For the dwarfs we would take 25 each of Tyson, Kirtland, Doyenne d'Ete, Seckel, Doyenne d'Hiver Noveau, Flemish Beauty, Bartlett, Glout Mor-

ceau, Henry IV., Napoleon, and Stevens Genesee; 50 each of Rostlezer, Duchess d'Angouleme, White Doyenne, Beurre Die, Easter Beurre, Fondante d'Automne, Beurre Superfin, Beurre d'Anjou, Vicar of Winkfield and Winter Nells, and 200 Louise Bonne de Jersey. *

Protecting Tender Vegetation.—(A. P.) During this month and the next, see to it that the trunks of tender trees are slightly protected. Young pear trees, cherries and even apple trees a few years planted, are benefited by setting up a board on the south side of the trunk, to keep off the sun. Or, if you please, wind a thin band of straw around them. Examine your shrubbery and tender plants, and see if the heavy snows have not broken off their wrappings, or if the dogs, hens or rabbits have not scratched them off. These two months are the most trying of the year to tender vegetation.

Double Flowers.—A correspondent of the *Agriculturist* from Boston, states that from the same parcel of seed he raised stock Gillflowers, in 1838 almost all double; in 1859 half, and in 1860 two thirds were single. The reason is obvious. It is an excess of vital force exercised in a given direction that makes a double flower—where this excessive vitality is lost, we might expect the flower to be single, and so it is. It is interesting in this connection to note that this loss of vital force which obtains should increase the ability to bear seed.

Poor House-plants.—(Jane.) Your trouble arises from too dry an atmosphere. A coal fire is worse than a wood fire for plants. Suppose you try, next year, a collection of Cactus plants. They are odd if not pretty; and they will stand heat and dryness, without wilting. The Epiphyllums and Cereus sections have magnificent flowers. Try the Aloes. They have quite a tropical look, and only need an occasional sponging. Can't you put a few of your fine plants under glass shades?

Castor Oil Bean.—H. A. Curtis, Portage Co., O., is informed that the Castor Oil is made from the seed, called a bean (seed list, 111,) produced by this plant. There are certain dwarf varieties for garden and greenhouse culture, which so far as we know, are neither more productive nor earlier than the common kind. The oil is simply expressed and subsequently purified. Probably in Portage Co., O., the culture would not be profitable.

Chickweed.—R. W. Tell your friend that chickweed is an annual plant. It grows from seed every year; so, if he does not let it go to seed, as soon as all the seeds in the ground have sprouted he will be troubled no more. Stir the ground often in hot dry weather. This will destroy the weed effectually. The culture of root crops and cabbages we would recommend if the ground is suitable and very full of seed.

The Tap Root.—"William." As to whether you should cut it off, will depend upon circumstances. "When nature," observes a writer, "puts a tap-root at the bottom of a tree, or a tail on the other end of a pig, she does it for some good purpose, and neither of them should be cut off without a valid reason." As to the pig, we won't debate, but as to trees, we know there are good reasons, at times, for amputating the tap-root. In seedlings standing in nursery rows, the central roots shoot down strong and deep, and must be cut off early, if we ever expect to transplant the trees. It is so with the oak in a remarkable degree. Cut off the tap-root when the tree is small, and a new set of horizontal roots will be formed, with many forks and numberless small roots and spongioses. And then, the transplanting will be easy, and the living quite a sure matter.

To Prevent Suckers.—R. M. S. Keep the soil loose and clean; apply in early spring unleached wood ashes and bone earth; and cut off the suckers with a sharp knife as soon as they appear.

Rape Seed Oil.—Why, asks a German subscriber, is not Rape grown as a field crop in this country, where spring frosts are not very heavy? I do not envy the Pennsylvanians for having discovered the coal oil fountains, for I can not get used to that oil. I want the pure, clear oil from winter Rape seed, which is without odor, and gives a soft, beautiful light. In Germany many of our large farmers pay their high rents from the sale of rape seed and wool alone.

Keeping Seed Peas from Bugs.—P. Hammer, of Boyd Co., Ky., writes: "Put the peas in bags, and for every quart add two handfuls of fresh wood ashes. Shake the bags well, and keep in a dry place. I have tried this several years, and the peas have always remained as sound and fresh after a year as when first

put up, and no bugs or weevils were found in them." We think they must have been free from bugs when put up, for the eggs from which the bugs hatch, are laid in the peas when growing in the pods. The dry ashes around them would hardly prevent the development of the bugs inside the kernels, where they grow, and come out to multiply usually after the peas are grown.

Cotton Seed—A Caution.—The interest awakened in reference to the culture of cotton in the Southern tier of the Middle States, is already leading to speculation in the seed; and, according to the newspapers, Government has appointed an agent to procure seed at Port Royal, and distribute it through the West. Large quantities of Sea-Island Cotton are being brought to this City before ginning, (cleaning from the seed,) so that there will be plenty of this kind of seed. But we will remind the readers of the *Agriculturist* that the Sea-Island cotton can not be cultivated, with hope of a crop, away from the sea-board, and there only in particular localities. The "Upland Cotton" as it is called, is the kind to experiment with. The two kinds of seed are very readily distinguished. The Sea-Island seed is nearly black, and has a smooth, naked shell, except a small tuft of cotton, hardly larger than a pin-head, on the small end—with sometimes a very little on the other end, and along one side. The Upland seed, on the contrary, is of a brown or chocolate color, and is completely covered with a mass of short cotton fiber which adheres so firmly as to require scraping with a knife to remove it. We have for some years distributed small parcels of cotton seed to grow as an ornamental plant, as both kinds will generally bloom in this latitude and even further north, under favorable circumstances. We put in each paper a few of the Sea-Island seeds to give greater variety of bloom.

How to Germinate Seeds.—S. McC., Nemaha City, N. T. Locust seeds ought to germinate without difficulty if planted early. If they do not, sow with sand, in a shallow box, and set the box in a sunny place, in the ground, top even with the surface. The freezing and thawing will prepare them to germinate in early Spring, when they may be planted. This, it will be seen, is Nature's way of doing the same thing. For the currant and gooseberry seeds, do likewise, except that the boxes should be in a sunless place—like the north side of a fence. If exposed to the sun they may germinate in Winter, and so lose their vitality before Spring. Sometimes we have induced germination in inert seeds by swelling them in very dilute, clear bleaching-powder water, about 24 hours. Weak "Chloride of Soda" solution would do as well.

Seed not Injured by Freezing.—G. E. Wheeler, Fond du Lac, Minn. When well dried seeds are not injured by freezing in a dry room.

Basket Willow—Time for Cutting.—S. C. Cut while the bark will yet peel easily, but not till the year's growth is about made, as the better the wood is ripened the better the quality of the osiers. The best time, in this latitude, is usually in September, or possibly a little earlier. New-York is the best market. Of the price at this time, it is difficult to speak, because there have been few sales of the article since the war commenced. At retail, in small quantities, four cents per pound may be considered the current price. Until the war is over, farmers may do better with other crops. Dealers say that much depends upon the quality, and that machine peeled osiers are worth little or nothing.

Grape Roots growing into Mortar.—Hiram Tarbox, of Windham Co., Conn., communicates to the *American Agriculturist* the following interesting fact from his own experience. In a cold graperie, in which three years ago, a pier for a hot-water pipe was laid in clean white mortar of sand and common lime, and at the surface a flat stone was put on, a black Hamburg grape vine was set about two feet distant. The roots extended to and actually grew into the mortar, filling it literally full of fibers. The mortar was of course kept a little damp below the surface. This would indicate that grape roots are fond of, or stimulated to active growth by lime.

The Prettiest Climbing Plants.—"Clara." The question involves too large a reply for our Basket. In a month or two more, we will say something at length on the subject. Meanwhile, a word or two. The *Maurandias*, pink, white and blue, are favorites with us. The *Madeira* vine is a very pretty thing in its foliage, the flowers come quite late, and are small, but very fragrant. *Cobaea scandens* is a wonderfully rapid grower. The *Nasturtiums* are desirable for the latter part of summer—for fruit (pickles), as well as beautiful for bloom. *Phaseolus multiflorus* should not be discarded. Of course the various colored Morning Glory is familiar to you.

"Western Plantation Syrup."

This name is adopted as the regular brand for the Sorghum Syrup, after being refined by the "Chicago Sugar Refining Company." This Company offers to receive at any of the railroad stations in Chicago, the crude syrup, as boiled down in the country; to refine it, and to return to the depot 75 gallons of refined syrup for each 100 gallons received. This includes the charges for cartage, cooper work, and the barrels, etc.

Refining Sorghum Syrup.—L. Martin,

Sangamon Co., Ill. Your queries are mainly answered on page 42. The process of refining the Sorghum Syrup is a principle somewhat like that practiced at the South for the common cane. The crude syrup is boiled with a small quantity of lime-water, to neutralize any acid formed. The juice is then passed through filters or strainers of bone-black (bones charred by burning so as to fall to pieces). It is then boiled to the desired thickness.

Sorghum Syrup.—Wm. Turke, New-Bremen, has made 1,200 gallons of Sorghum syrup. He ground the cane and evaporated the juice for his neighbors at 25c. per gallon. His syrup sells in New Bremen at 75c. per gallon. The seed is not near as good as formerly, only one half giving good canes. He asserts the need of a new importation of seed.

Sorghum in Michigan.—Almon Maltby writes to the Michigan Farmer, that he manufactured 320 gallons of good syrup from two acres of ground. This from Livingston Co., in latitude 42½°, is a favorable indication of what may yet be expected from the "Chinese Sugar Cane" at the North.

Couch, or Quack Grass.—"C." Groton, N. H. The grass you send is the one named above. It is a detestable weed, but makes excellent hay.

"Skirving's Improved Swedish Turnip."

Some seed sent to us from the Patent Office was sown June 24, on good soil, by the side of other varieties. But after standing in the ground until Nov. 13, it had not a bulb the size of a finger, while the other kinds produced well. As this variety stands high in England, we think the fault must have been in the Department at Washington. We had hoped that after the dismissal of "D. J. B." no more mulleins would grow from "improved tobacco seed." Perhaps some old purchases of seed may have been left behind. Whoever has charge there should gather up and burn the contents of the old seed drawers, and not trouble the country with them—and himself take warning from the past.

Kohl Rabi.—The wife of a subscriber is informed that this vegetable may be cooked like a turnip or cabbage, and eaten in the same way. Cut in half inch slices to boil and change the water in boiling once or twice. Serve mashed with butter or cream, or not mashed but with drawn butter or cream poured over it. For Winter use they should be treated like a cabbage. Always use them before the eyes in the axils at the base of the leaf stalks start to grow.

Wire Worms.—W. F., of Warsaw, N. Y., has land materially injured by wire worms; by a course of cultivation, he has, as he thinks, rid his land of the pest. After giving an account of three experiments to the *American Agriculturist*, he writes: "My opinion is that three crops of buckwheat, potatoes, beans, or peas, will entirely starve out the wire worm. I have found, sometimes, that Fall plowing was best—not always. If land is to be sowed early, then plow in the Fall: if late, it will make little difference, so far as worms are concerned."

Rose Bugs on Grapes.—B. H. S., South Yonkers, N. Y. Your trouble with rose bugs on grape vines is nothing new. This little beetle genus, *Melolontha*, appears annually, sometimes in countless numbers, attacking roses first, but extending their ravages to cherries, plums, grapes, and other plants. The laying and hatching of their eggs, and transformations, are an underground work: done out of sight and reach of man. They can be attacked only when in their perfect state, and at their mischief. The females, which constitute about half the number, deposit some thirty eggs each. Like other insects, they have their natural enemies; so every person who crushes a hundred may consider that he is working with the other Heaven-appointed instrumentalities to hasten their disappearance. Poultry destroy a good many, but when abundant these soon become satiated.

Lime for Lice on Cabbages.—Wm. W. Bailey, a lad, writing to the *Agriculturist* from Genesee Co., N. Y., says he was whitewashing a fence by the side

of some cabbages badly affected by plant lice, (aphis,) and to try the effect of lime upon the insects, he sprinkled whitewash upon the leaves and stalks, which entirely destroyed the lice.

Security from Bee Moths.—"M." Tipton Co., Ind., thus writes to the *American Agriculturist*: "The bee-hives of all my neighbors, and my own also, suffered considerably from worms. I got rid of them by following the advice of a friend, viz.: Don't put the hives of young swarms on boards, but on bricks, closely laid together, fill the space between the bricks with wood ashes, brushing off all that may lie on top. The moth does not lay her eggs on stones, as the sun does not hatch them out there, but always on wood. My hives have been free from these worms ever since."

Swans at the Central Park.—It will be recollected that the free city of Hamburg presented 12 pure white swans to this City, two years ago, for the beautiful sheet of water in our Central Park. Unfortunately, several of them died soon after they arrived here, but more were subsequently sent. They appear very much at home, sailing gracefully about in the water, and are one of the chief attractions to the thousand visitors daily enjoying the fine scenery of the Park. The swans commenced breeding, for the first time last season, four nests having been made in nooks near the water. Two were deserted after a severe thunder-storm, but from the other two broods of cygnets were hatched. The young might be seen swimming by the side of the old ones, or raising their long necks from the grass which concealed their nests.

Poultry—Weight of Dorkings.—W. J. of Westchester Co., N. Y., referring to the 7 to 8 lbs. weight of "crammed poultry," (January *Agriculturist*, page 9,) says he was led to weigh his grey Dorking pullets of 1861, and found them to run 7½ lbs. each. The young cocks of same breed weighed 8 and 8½ lbs. Of the older broods, the hens weighed 8 to 9 lbs., and the cocks 10 lbs. each. They were in ordinary condition. He esteems this breed the best for general use, for, besides their heavy weight, they are good layers also.

Chickens.—S. K., Dayton, Ohio. Chickens do better to have a range, but if the crops are likely to suffer by them, they will do very well in the henry, if allowed but a limited run—enough to secure plenty of fresh air. They should at least be let out awhile morning and evening, and have green food of some kind—grass in summer, and cabbage sprouts, etc., in Winter.

Frozen Eggs.—Sophia J. Damon, of Plymouth Co., Mass., says frozen eggs should be kept in that state until wanted for use, then put in a dish of cold water, and set on the fire to thaw gradually. When the water will just bear the finger, they may be broken, and will be found as fresh as when first laid.

Nest Eggs in Winter.—"J. B." If the glass or porcelain eggs can not be had, make imitations of wood and paint white, or make them of chalk. By breaking a small hole in each end of an ordinary egg, the contents may be blown out with the mouth, and the shell used for a nest egg. They will be perfect if filled with plaster, or rosin, or any substance that will set hard, and will not melt by the heat of the hen.

John Sanderson's Large Ox.—Z. D. Bardwell, of Franklin Co., Mass., sends the measurement of a large ox, owned by John Sanderson, in that County, and asks if any of the readers of the *American Agriculturist* can report a larger animal.—"Age of ox, 8 years; girth back of shoulders, 10½ feet; largest girth forward of hips, 11½ feet; height, 6¼ feet; length from between the roots of the horns to the root of the tail, 9½ feet; breadth across the hips, 3½ feet; distance from point to point of shoulder, 3½ feet; greatest distance through shoulders, further back, 4½ feet; length of span, 8 feet; inside distance between the fore feet, as he stands eating naturally, 36 inches; live weight, 3,500 pounds, in October, 1860, since which time he has not been weighed. [Are there no scales large enough in those parts?—Ed.] He has been fed 12 quarts of meal per day—a mixture of corn and oats—and eats as well now as ever. He has the range of the yard, and lies under the barn opening to the East."

A Great Hog.—We have to-day (Jan. 17,) seen a pure Suffolk hog, at 90 Cedar-street, worth looking at. He pretty well fills a one-horse wagon box, and weighs dressed 1,053 lbs., or more than half a tun. Live weight on the 14th inst. 1,393 lbs. Age 19 months. Fed and slaughtered by W. H. Libby, on his farm in Madison, N. J. Was imported at 3 months old, from Suffolk, England, by Frank Lathrop, for breeding but be-

came too large and was castrated at 9 months old. Fed on corn meal, milk, etc.

Kind Treatment of Animals Profitable.

—The horse serves us with a superior ability and a better will, if treated kindly. On the same condition, the sheep gives us a better fleece; the ox, more efficient labor; and the swine, a better carcass. The cow, that is dealt gently with and made contented with her lot, gives us, not only more milk, but of a richer quality, than if ill treated, fretted and made miserable. All animals make a better return, if cared for considerably. "The merciful man is merciful to his beast." He would be so if there was no reward. We owe it to the animals, which are put into our power; we owe it to ourselves; and we owe it to God, who has given us power over them, to make the brief space we intend for them, free from all unnecessary suffering.

Remedy for Kicking Cows.—D. Parker,

Jr., of Green Co., Pa., writes: When a boy, I saw an article in a paper stating that tying a cow's head a little higher than she ordinarily holds it, would prevent kicking because a cow lowers her head and rounds up her back, when she kicks. My father tried it and found it to answer, except in the worst cases. The remedy has been used in the family ever since.

Mad Itch in Sheep.—G. U. S., Luzerne

Co., Pa., writes that "a new disease has lately appeared among the sheep of his neighborhood, called the 'Mad Itch,' and wishes information. We have never known this name applied to a form of the 'scab,' to which it might, with all propriety, be given, but presume that this is the ailment—a subcutaneous disease, causing intolerable itching, but not affecting perceptibly the surface of the skin. Youatt says it is not contagious, and recommends housing, shaving, washing with soap suds, and then, every other day, washing with lime water and a decoction of tobacco. We have never met with the disease but should we ever have to treat it, would surely administer flour of sulphur pretty freely in milk, and perhaps turpentine, or tar in small doses, so as to bring the disease out upon the surface, and then treat it like common scab. Diseased animals should be most completely separated from the rest of the flock."

Too Much Opium for Sheep.—In the

prize article last month, which was generally correct, a bad error occurred on page 13, which we did not notice until too late to correct it. The writer prescribes a scruple (20 grains) of opium for a sheep. We suspect a sheep weighing 150 lbs. would require no more opium than a man of the same weight. One grain of opium, or 20 grains tincture of opium (laudanum,) would be nearer the mark.

Why Not Eat the Heart?—On one of

the closing pages of this paper, will be found two articles which have cost us a great amount of labor, and which will be well worth studying and saving for reference, viz.: "New-York Live Stock Trade, for 1861," and "Items in a Meat Bill." There are several items of a kind never before published together, such as those giving the average weights, shrinkage, etc., of animals, and especially those referring to beeves' offal. But we commenced this to speak of one item there noticed, viz.: that Beeves' Hearts average 6 lbs., and yet sell for an average of only 10 cents each, or 1½ cents per lb. We visited a large number of butchers, in order to get at the correct figures in the article, and they nearly all said it was difficult to find purchasers for beeves' hearts at above 10 or 12 cents each. Said one: "If a poor woman comes to my stall to spend her last 20 cents for meat, she will take 1¼ lbs. of steak, and refuse two beeves' hearts, weighing 12 lbs., for the same money." We can hardly account for this, when, pound for pound, the heart is as nutritious as any other part of the animal. Query.—What is the best method of cooking and serving a beef heart?

An Aged Cat.—We do not remember to

have seen any statement of the age of cats. It seems to be the general impression that, at 6 or 8 years old, pussy is an "old cat," if not the old cat. According to the N. H. Jour. of Ag., there is in the family of J. G. Wilson, of Lee, a cat 25 years and 7 months old, as categorically demonstrated by the family register. This must be the very old cat. If anybody has an older one let it be recorded in the *American Agriculturist*. Can any one tell us the average age of cats?—that is, of those allowed to live out their natural lives.—It is commonly reported that some cats have "nine lives." What is the length of each life?

Tan Bark for Manure.—We do not

think very highly of it, in its crude state. A farmer in our own neighborhood, is now (Nov. 13th) hauling it from the tannery, and spreading it over his meadows, confident that it will benefit them. Good luck to him! For our

own part, if we were to use it, we should employ it first in a dry state, as an absorbent of urine in the stable, then, let it lie in the manure heap a full year, to decompose. A method employed by some, is to spread the tan in an open place, eighteen inches or two feet thick, then shovel on a layer of lime two or three inches thick, then from four to six inches of tan, and so on until all the tan is used up. Wait nearly a year, then shovel the heap well together, and let it lie several months more.

Substitute for Stable Manure.—"A Novice" inquires of the *Agriculturist*, "What manure would you recommend, in the absence of barn-yard or stable manure, for a small place of two or three acres to be used for vegetable and fruit culture. The soil is good old pasture ground and very rough.".... Go to work at once to make compost, buy (for of course you have money) such articles as damaged glue, leather scraps, refuse bristles and clippings from the brush makers, blood, etc., from slaughter houses, horn shavings, soap boilers waste, fish offal, and we may add, animals of all sorts, particularly old horses. All these things, and others too, may at times be bought much cheaper than any other fertilizers regularly in market, and a good man who takes an interest in it will compost them with earth, turf, muck, soils, or some such material, so that they will be inoffensive and make a very rich manure. Wood ashes, lime, soap boiler's waste, and other alkalis should not be mixed with animal substances, except to force a fermentation in cold weather. In working the soil add bone dust freely and directly, especially where fruit trees are to be set.

Lime.—"X." asks: After lime is slacked, how long will it remain in a caustic state if kept from the rain as in an open shed?—*Ans.*—Say, six or eight weeks.—It very readily attracts carbonic acid and becomes inert.—*Ed.*.... If it should get hard as for instance, when the water evaporates from a whitewash barrel and it leaves the lime hard and lumpy, can it be easily reduced to powder?—Not easily till it is so dry as to be readily pounded to powder.—*Ed.*.... Is it right or wrong to mix lime with the muck which is to be used in the stables, or cow yard?—Right, three months beforehand.—*Ed.*

Manure in the Cellar.—G. W. S., Gilmanton, N. H. Were fresh manure, that is dung and litter mixed and unfermented, to be applied and plowed under, there would be no loss of any thing. When manure lies in a cellar or well made dung heaps, or compost heaps, it ferments and should lose only carbonic acid and water, a small quantity of ammonia is doubtless lost, but it is very small, if the manure heap is kept compact and moist.

Top Dress Meadows.—As soon as the grass is cut if you have, and you should have, fine rich compost. Manure from the dung heaps (more or less rotten) may be applied late in autumn or early winter, before the ground freezes.

"How to get and Use Bones."—H., says he is at a loss. "They cost too much." The boys will collect them for a few cents a bushel about the village. Many may be saved in the family, and with a little care you will be able to collect plenty at a price not to exceed $\frac{1}{2}$ cent a pound.

To Dissolve fresh Bones.—There is no Patent on the method and it is worth 25 years subscription to the *Agriculturist*.—Pound them up fine and feed them to hens. This is the best time of year, though it is good at all seasons.

Hulled Corn and Hominy.—J. C. Brattleboro, Vt. We know of no machine for hulling corn by hand. There was a Hand Corn Huller in the market six or eight years ago, but nothing has been heard of it of late, and it has probably gone out of use. Perhaps there is a small field for an inventor.

Bob Sleds—Double Sleds.—Bob sleds are well known in new, woody, snowy regions, as sleds with very short runners, designed for long timber, one end to draw on the snow. When an extra pair of runners are attached, for sustaining the hind end of the timber, or of a rack, if one be used, they are called double sleds. A subscriber in Maryland (W. Edmondson, of Ellicott's Mills), sends to the *Agriculturist* a strong recommendation of them, claiming (1.) that the double sled runs more lightly than the single long runners; (2.) that it is more convenient for turning; (3.) that it is stronger, and carries its load over rough ground with more ease and safety. He thinks it would be useful to farmers, if we were to describe the double sled, with directions for making. At present, we can only say: the runners are to be short—say $2\frac{1}{2}$ or 4 feet, and very strong; the tongue, like that of any other sled, lighter, if for horses, and heavier, if for

oxen; and the connecting rod between the two pairs of runners, to be jointed near or at the beam of the forward runners, and to be so attached to the beam of the hind runners, as to admit of lengthening or shortening the distance between the two beams at pleasure.

Cleaning Spelt.—"Meyer," Tipton Co., O. A full description of spelt or "Dinkel," is given in vol. 19, p. 104. As there stated, the chaff adheres so closely to the grain that a hulling or chaffing mill, similar to a rice mill, is required to prepare it for grinding into fine flour. These spelt mills are common in Germany, and will soon become so here, if it be found that the grain can be profitably grown in this country. This is the first thing to be established, and to have this tested is our object in distributing the seed. In Germany it yields well on soil that will not produce wheat. There will be no loss in the trial, for the grain is valuable to feed, and is thus used in some parts of Europe, where it is not needed for human food. [Many thanks for "Meyer's" kind words, and those of his good wife. Such opinions are worth working for.]

Steam Plowing.—Mr. Robert Walkington, North Ormsby, Eng., having furnished himself with Roby & Co.'s 10 horse engine, and Smith's 5 tined, patent cultivator, for running $7\frac{1}{2}$ inches depth, gives the following as the result of his experience thus far: cost of plowing 238 acres by steam, \$140.48; estimated cost of doing the same equally well with horses, \$389.62; difference \$249.14. It is rather hard to believe that, if the interest on the cost of machinery, its depreciation by use, etc., were fully estimated, the difference would appear as great as this.

Novel Method of Filling an Ice-House.—A gentleman residing at New-Hartford, Conn., has a pipe, leading from a spring above, pass through his ice-house. This is pierced by numerous small holes, and when the weather is very cold the house is thrown open and water turned on. The fine spray and jets freeze as they fall, and in a few days, or weeks at furthest, the house is filled with one solid "lump of ice," with no labor of cutting and hauling. So says the Winstead Herald.

The Royal Cheese.—An inquiry in the *Gardener's Chronicle*, in regard to a monster cheese presented to the Queen by the Somerset folks, elicited these facts: "The inhabitants of West Pennard, a village near Glastonbury, Somerset, in order to prove their loyalty, resolved that a cheese should be made from the milk of all the cows in the parish, and when ripe, should be presented. An immense vat was prepared, embellished with the royal arms, etc., and on the anniversary of the Queen's coronation, 50 of the wives and daughters assembled, with one meal's milk from 737 cows. This amounted to upwards of 20 hogheads, and occupied the contributors from morning until night to turn it into curd. When finished, the cheese was 9 feet in circumference, 3 feet 1 inch in diameter, and 1 foot 10 inches thick. It was presented to the Queen Feb. 9, 1841." It makes little difference whether it was presented in 1841 or 1861. Carelessly written, they look much alike. The date does not affect the fact that it is one of the largest cheeses on record.

Knitting Machines—Ice.—S. D. J., Ripley, O., inquires, whose is the best knitting machine? and whether ice-houses are not better, built underground? If any one knows of a good family knitting machine, he should make it public. Ice-houses built above ground are more convenient, and, if built rightly, are good enough, for they will keep ice the whole year, and will make an adjoining room cool for meats, milk, butter, etc. But they must necessarily be somewhat expensive, or make but an indifferent appearance. Where the most rigid economy is desired it may be better to build wholly or partly underground.

Removing Smoke Stains from Marble.—"S." of Essex Co., N. J., says he removes smoke stains from marble mantels, by applying a little chloride of lime (obtained at any druggist's) wetting the chloride with water to form a paste. This will doubtless take out the stains, if they are made by smoke, but we are not certain that it will leave the polished surface of the marble uninjured.

Quick Work.—Owing to the breaking of a Paper Mill shaft, the contractors were likely to get a little behind in supplying the paper for the November *Agriculturist*. Night came and the presses must needs stop unless a supply could be obtained by the next noon. One of the firm (of Seymour & Co.) left the City and reached the mill at Morristown N. J., at 7 P. M., and ordered paper to be made. At 10 o'clock the next morning, 16,000 sheets of paper had been manufactured, calendered, cut and delivered at our press rooms in this City, giving a supply for the day. A portion of this was printed, folded,

stitched, and mailed, and was on the way to subscribers at 2 P. M., or within 19 hours of the time the order reached the Mill at Morristown, 30 miles from the City.

Profanity.—A few days ago, says a correspondent, a boy was using very profane language. He was talked with kindly, and shown how wrong he was. He seemed quite sorry, and, looking up with a tear in his eye, said, "Well, who was the first person I ever heard say bad words?—It was my father?"—Did his father think what a lesson his words taught?—*Ed.*

Usefulness of Canals—N. Y. City and the Country.—During 1861 the freight brought to New-York City through the Erie Canal and its connections, (the Champlain, Oswego, and Genesee Canals,) amounted to 1,531,529 tons, or 3,063,958,000 pounds, valued at \$50,905,253. Nearly all of this was agricultural products. The freight from New-York by the same routes was 93,778 tons, valued at \$20,790,404. This would show a very large balance of trade against the City in favor of the Country. But this balance is in part reduced by the fact that the freights to the City were mainly of a heavy character, grain, etc., and these passed over the canals, while merchandise from the City was more costly, and was more generally sent by railroad. Not a little of the balance, however, went to cancel debts of the country to the City, contracted in former years.

New Use for Diamonds.—A circular from Montreal, L. C., describes an invention of Mr. J. Dickinson, by which a diamond is used for dressing the surface of millstones, instead of the steel pick now employed for that purpose. It is said that the lines cut by the diamond upon a new stone, are clear and distinct, with sharp cutting edges, and that they will remain in good order longer, and perform better work, than where the stone is dressed in the ordinary way. But (1.) where are we to get all the diamonds needed, and at what price, and (2.) are real diamonds large enough to "pick" mill stones?

To be an Editor.—"Franklin," of Pa., wishes to become an agricultural editor, and to be advised about schools, etc.... Don't think of such a thing. Go to Dr. Pugh, at the Penn. Farm School, if you will, but do not try to be an editor unless you see you are unmistakably qualified, and then do it as you would enlist for the war or go a missionary to Madagascar—from a sense of duty.

An Odd Abbreviation.—The word "Ibid" which may often be noticed appended to articles taken from the *American Agriculturist* and printed in other journals, is an abbreviation of the name of this paper. Our readers will bear this in mind whenever they see good articles thus credited to "Ibid."

Good Crops.—Geo. A. Elston, of Bradford Co., Pa., writes that his 12 acres of wheat threshed out 300 bushels (25 bushels per acre) of plump grain weighing 62 lbs. per measured bushel. His oats averaged 55 bushels per acre. These are very good crops for that section of the country, though 25 bushels of wheat per acre would not be thought large in many other localities. We like to hear of these good crops, but can not find space for publishing many such reports, because we prefer to occupy the pages of the *Agriculturist* in telling how to produce big crops. To tell Mr. A. that Mr. M. got 40 bushels per acre, may be pleasant news, or it may not be. If he does not know how to get 20 bushels, it may be discouraging. But tell him how Mr. M. gets 40 bushels and you will do him good, both in feelings and in purse.

Coal Tar.—A correspondent writes concerning this article: "On corn it is an effectual remedy against fowls and birds. Late in the Summer I applied a coating of coal tar to the roots of young peach trees, and on a recent examination, all appeared healthy and free from worms. Will some reader of the *Agriculturist* who has tried its use for long periods give the result?" [We have heard of injury resulting from painting the stems of trees with coal tar.—*Ed.*]

Remedy for Poison by Ivy in Meadows.—Wash, or, if convenient, soak the part affected in strong oak, or tan liquor, which may be prepared by boiling oak bark. So says a correspondent of the *Agriculturist*.

Driving Rats with Powder.—James Goodwin, of Columbia Co., Wis., says, "Tie up a teaspoonful of powder in a cotton rag, and tie this to the end of a piece of blasting fuse, and push it in the rat holes as far as possible. Ignite the fuse, and before the fire reaches the powder the rats will be off on the 'double quick.'"

Lime upon Lime Soils.—R. R. Bryan, of Blair Co., Pa., writes to the *Agriculturist*: "I desire information on the subject of applying lime to limestone soil. I have plowed and subsoiled some sixteen acres of heavy sod for corn, the subsoil plow loosened the yellow earth about five inches below the bottom of the 6-inch furrow. It is called 'limestone clay,' and I am hesitating about burning lime, as it may be there is lime enough in soil."...It is an important fact that the action of lime, (fresh slacked) is often most favorable upon limestone soils. This not by virtue of its being valuable as plant food, but because it produces some favorable chemical and mechanical effects upon the soil. By all means make the trial.

Muck.—E. Gould, Wash. Co., N. Y., wants to know how to prepare muck for use, has large supply, some say burn it and use the ashes, others say slack lime in it to sweeten...Dig in the Winter or before; let it lie and freeze and dry; when it can be handled, mix it with manure in the barn cellar, yard, or compost heaps; or make a heap using 3 to 5 bushels of fresh slacked lime to a cord of muck, spreading the muck in six inch layers, and throwing the lime over it. Work the heap over in about ten days, and use it on the land in three weeks, or, as an absorbent with cattle manure after three months.

Carrot Tops for Dyeing.—"In the vicinity of Hartford," writes a subscriber whose daughter is in East Hartford on a visit, "carrot tops, mown off, sell for \$30 a ton, to be used in dyeing blue cloth." [We don't understand how the blue color is obtained.]

Humbugs to be Avoided.—"Free Lottery Tickets for Agents," sent to Canada, (and everywhere else,) by B. B. Hoyt, and Th. Owens & Co., hailing, at present, from Progress, N. J. Also, "Grand Social Banquets," "Mechanics' Union Clubs," etc., at Salem and other towns in New-Hampshire, including George Hamilton, James R. Lawrence, and all others who write letters offering to procure \$100 prizes by lying, for the small sum of \$5. If they tell one lie, as they offer to do for \$5, they will tell another one and keep the \$100—if drawn. Also, "Doctors" in Northern New-York, and elsewhere, offering \$30 for distributing circulars, if you send 25 cents for entering your name on their "Agents' Books." Also, those hailing from Boston and elsewhere, who offer you \$20 to \$30 a week if you send \$1 for a pamphlet of instruction. (Why did not H. H. M. & Co. stay in England and Ireland, if they found "over 10,000" fools there?) Also, any one in New-York who offers \$20 to \$100 a week for selling sewing machines, if you will first send them \$5 to \$15 for a "sample." Also, "Rev." Edward A. Wilson, of Williamsburgh (whom we can never catch "at home"). Also, his aliases in New-York and Brooklyn, who offer cures of consumption free. Also, sellers of Japanese Wheat. More hereafter.

Corn Meal—To Make it Keep Sweet.—In a letter just at hand from Mrs. O'Brien, who received the first premium for Corn Bread, she says: "If you take corn meal when purchased at the market or grocery store, and put it in a pan and leave it warm in a warm stove-oven over night, it will keep better, will acquire a sweetish taste, and will rise and bake better. The little trouble to do this will be amply repaid....I do not like scalding meal before using, as it tends to make it clammy, and can do little if any good; drying the meal is safer and better."

Cheap "Wringers" worse than Useless.—Just now there is no little excitement about wringing machines, and since a good article is found to be useful, the country is being flooded with all sorts of cheap affairs, from \$1 upward. We must caution the readers of the *Agriculturist* at least, that as yet there is no wringer before the public worth buying which has not two cylinders, thickly coated with India Rubber, (at least half an inch thick all round;) and that these cylinders must be made to turn together by connecting cog-wheels. Without the cog-wheels the rollers are liable to slip and tear the cloth, no matter how strongly it may be asserted to the contrary. Without the thick rubber, the instrument will not do its work well. No good wringer can be sold at retail for \$5, at the present price of India rubber.

Come Round Right at Last—The Tribune on Premiums.—Years ago, the Publisher of the *Agriculturist* acted upon the idea that it would be just, and more pleasing all round, to offer pay, in the form of good articles, to those who took the no small trouble of getting up and forwarding large lists of names, instead of making begging appeals to them, to "work for the good of the cause." He also thought to do a good work for the country by sending out new or desirable seeds for propagation and a wider diffusion. But what a hue and

cry was made! "Humbug" was the quite common slur of the press. We remember the Tribune gently hinted that the *Agriculturist* was not intrinsically worth the price asked for it, but needed a little of something else "thrown in" to make it worth a dollar a year.—But what a change! Now, nearly all enterprising journals, religious, scientific, agricultural, news, etc., are offering premiums (pay) to canvassers. Many of them have "stolen our thunder," and doubled it; and, tell it not in Gotham, even the Tribune has come round right at last, for it now pays agents for services rendered, by supplying them with writing apparatus (pens.) Very good, Mr. Tribune. Now, having had more experience than you, let us advise you to add some white paper and a bottle of ink, and then put in some good seeds as we do, to complete your agricultural department, and you will make your paper, with the extras, worth its price....[Are we "square" now, Mr. Tribune?]

Hogs—Cost of Bringing to N. Y.—Jan. 9, Messrs. Zeublin & Hardy, of Pendleton, Madison Co., Ind., (28 miles Northeast of Indianapolis, on the Bel-fontaine Railroad,) shipped 465 live hogs on that road. The average weight was 261 lbs., and they occupied 8 single-decked cars. The lighter hogs went 65 to 68, the heavier ones 51 to 53 to the car. The cars went through to Buffalo, taking the Columbus and Cleveland road at Gallon. The freight from Pendleton, Ind., to Buffalo, was \$72 a car, which included return passes for three men accompanying the hogs. Average freight per hog, \$1.24 to Buffalo. Time to Buffalo, 52 hours. Two hogs died and were sold at Buffalo for 1½ cents per lb. Cost of feed and hotel bills, during 2 days detention at Buffalo, \$25.—From Buffalo to New-York, by Central and Hudson River Railroads, five double decked cars were required. Time through about 40 hours. Freight through, 47½ cents per 100 lbs. They were called 108,616 lbs., and the freight \$515.92, or \$1.11 per hog. Free passes were given to the three men while with the hogs, but no free passes to return to Buffalo. Whole cost from home for 465 hogs, \$1,116.92, or \$2.40 per hog—a trifle less than one cent per pound, on home weight. To this is to be added in New-York, 3 cents each for yardage, 1 cent each for weighing, cost of the feed, and 1½ per cent commission for selling. The shrinkage will be about 20 lbs. per hog, or 8 lbs. to the 100 lbs. These were larger than the average run of hogs, making the freight a little higher for each.

Farmers' Tricks of Trade.—The following from a correspondent needs no comment: "Of two Long Island farmers, one warmly contended that custom sanctioned putting the largest and finest potatoes, apples, pears, peaches, etc., on top of the basket or barrel, for if this is not done, they bring lower prices. The other, who was more conscientious, said he could not do it, notwithstanding custom sanctioned it, and he was aware that he got less for his fruit and vegetables than his neighbor did. As a buyer for family use, I listened attentively, and regretted to find that the majority of buyers, or market men, at least, are thus paid a premium for what I should term deception, if not dishonesty. For a long time I have observed this tendency to make the finest show upon the outside; and when I wish to buy a basket of apples or peaches, I have to ask the dealer to pour them out, to see how the bottom compares with the top. What says the *Agriculturist* to so glaring an evil? Shall we not rather encourage uprightness in all our dealings, than countenance deception in any way? I know of parties who have bought what they supposed to be fine baskets of fruit, judging from the outside appearance, and finding them so very inferior generally, they have resolved never to deal with such sellers again. As it now is, a person is certainly liable to be deceived, unless he overhauls every package of fruit or vegetables coming to market. As far as one purchaser is concerned, I am resolved to purchase of such persons as the conscientious dealer referred to, when I can thus encourage honesty rather than duplicity."

Cotton Speculation in England.

It is stated in English papers that almost every body in that country is infected with the mania for speculating in Cotton. Clergymen, doctors, lawyers, and even ladies are investing in hopes of speedy fortunes. The effect will be baleful, when the bubble bursts.

Vermont Farm Scene Wanted.

Honestus Stearns, Windsor Co., Vt.—Good. We endorse your criticisms on the November *Agriculturist*. Can't you give us a real genuine Vermont Scene?—a picture of one we mean.

The Parlor Gardener.

A very neat concise little book, on the House Culture of Ornamental Plants, full of suggestions, in the main reliable, and expressed in a playful style. Translated from the French and adapted to American use, by Cornelia J. Randolph, of Virginia. Published by J. E. Tilton & Co. There are

several fine cuts of table ornaments, in the plant line, and the book is well worth the price (65 cents). Sent post-paid.

To Onion Growers.—We have a neat pamphlet of 32 pages, containing the condensed but plain directions given by *Seventeen practical Onion Growers*, residing in different parts of the country: and embracing full directions for every item of labor, from selecting seed and preparing ground, to harvesting and marketing crop. Nowhere else can so full, complete, and useful information on this subject be found. Sent post-paid on receipt of 21 cents (or seven 3-cent stamps). Address the Publisher of *American Agriculturist*.

Of Stationery, Blank Books, etc., Francis & Loutrell, No. 45 Malden-lane, manufacture a large assortment. We acknowledge the receipt of a very fine Pocket Memorandum and Daily Diary for 1862, which we are turning to practical account, daily.

Books on Trees and Shrubs.—W. H. Baker, Racine Co., Wis.—Meehan's Hand Book of Ornamental Trees (75c.) is the best American work, for a cheap popular book giving descriptions and methods of propagating, condensed in a small compass.

Iowa College Farm.—Nearly the whole of the \$10,000 appropriated by the Legislature of Iowa for agricultural purposes, was expended in the purchase of a farm, in the erection of farm buildings, and in settling out trees and otherwise commencing farm operations. An Iowa correspondent of the *Agriculturist* says, that little or nothing is now doing, but that the college farm interests are secured against loss, and will probably so remain till peace returns.—A wise arrangement.

American Pomological Society.—Ninth Biennial Meeting, at Boston, Sept. 17th, 1862. We learn by a note from the President, Hon. Marshall P. Wilder, that the next meeting of this association will open as above. Previous meetings have been held at New-York, Boston, Philadelphia, Cincinnati, and Rochester. This is the only National Society, devoted to horticulture or agriculture, which has deserved and enjoyed a successful career. It has eschewed all financial speculations, and money raising dodges, and thus kept free from a class of harpies who invariably attach themselves to every national enterprise, when there is and money to be made, and if not shaken off bring it to disgrace if not ruin. The friendly meeting of fruit lovers, for a calm discussion of the real merits and demerits of the different varieties of fruits, is productive of good to themselves and to the country at large. We can but hope that before next September, our National troubles will be so far settled that, as in the past, the Pomological Meeting will be a National one.—The Massachusetts Horticultural Society has ordered its Annual Exhibition for the same week.

Conn. Grape Growers' Association.

—The Annual Meeting was held at Hartford, Jan. 7th. The election was deferred to an adjourned meeting to be called by the Executive Committee. Present officers: President, D. S. Dewey, Hartford; Vice Presidents, C. S. Middlebrook, Bridgeport, and E. A. Holcomb, Granby; Secretary, Mason C. Weld, (now) N. Y. City; Treas. W. H. Risley, Berlin.

The Kentucky Agr. Society.

—Held its annual meeting early in Dec., and re-elected Col. L. J. Bradford, of Bracken Co., for President, and chose for Vice Presidents—P. Swigert, Franklin Co., 1st District; J. B. O'Bannon, Jefferson Co., 2d Dist.; Jno. G. Holloway, 3d Dist., with 5 directors for each district. The President in his address stated that the Annual Tobacco Fair at Louisville, had added (annually?) \$2,000,000, to the value of that staple in that State.

Conn. State Agr. Society.

—At the Annual Meeting, at Hartford, Jan. 8th., the following officers were elected for 1862: President, E. H. Hyde, of Stafford; V. Presidents, R. Battell, of Norfolk, and D. F. Gulliver, of Norwich Town; Cor. Sec. Henry A. Dyer, of Brooklyn, Windham Co.; Rec. Sec. T. S. Gold, of West Cornwall; Treas. F. A. Brown, Hartford; Chemist, Prof. S. W. Johnson, Yale College, New-Haven; Directors, (appointed by Society, one for each County).—Chas. M. Pond, Hartford; Randolph Lindsley, New-Haven; James A. Bill, New-London; E. Hough, Fairfield; Levi Cowles, Middlesex; Lemuel Huriburt, Litchfield; Benj. Sumner, Windham; R. B. Chamberlin, Tolland. Directors (appointed by County Societies).—J. A. Hemmenway, Hartford; N. A. Bacon, New-Haven; Henry Bill, New-London; G. W. Seymour, Litchfield; Ezra Dean, Windham; Stephen Hoyt, Fairfield; J. S. Yeomans, Tolland; no one yet nominated from Middlesex.

New-York Breadstuffs Trade, Meat Trade, etc., for 1861.

We hardly need call attention to the condensed, but very complete tables in our Market Review on pages 58 and 59. They have been prepared for the *American Agriculturist*, with much labor and great care, and our readers will be able not only to see at a glance, the trade of the year just past, but also to compare this trade with that of the previous two years. These figures explain the improved condition and feeling of the country, even in the midst of war. The prices of farm produce, in the Western market towns, have not been high, as compared with a few years ago, yet the amount of money sent westward for produce, in the year 1861, was enormous, as compared with previous years. Let us look at table 3 (page 59), showing the receipts at New-York for each of three years, and see what amount has been paid to producers for Breadstuffs, through the direct channels of trade. (The receipts are only those coming through regular channels, and recorded. Large amounts, purchased to arrive, have gone directly to receivers, without any record being made; and much has come in by transient routes.) The prices used in the following estimates are the average of all sales made throughout the year.

RECEIPTS AT NEW-YORK FOR 1861.				
Kind.	Amount.	Average Price.	Value.	
Wheat Flour 4,968,971 bbl.,	at \$4.40		\$21,863,443	
Wheat 25,439,125 bush.	at 1.30		33,070,863	
Corn 30,736,166 bush.	at .60		18,441,699	
Corn Meal 95,519 bbls.	at 3.00		286,557	
Rye 775,665 bush.	at .72		558,478	
Barley 1,834,304 bush.	at .68		1,246,326	
Oats 4,832,009 bush.	at .30		1,449,623	
Total for Flour and Grain			\$22,898,555	
To this let us add the amount paid for Live Stock, as given on page 58,			\$22,483,516	
Total for Breadstuffs and Live Stock.			\$104,003,871	

This is without taking into account the irregular receipts of Grain, Live Stock, etc., nor does it include salt meats, poultry, lard, butter, cheese, eggs, potatoes, fruit, wool, hay, hops, seeds, tobacco, etc., etc., received at this single market, tables of which would fill a large volume.

Range of Prices in 1861.—For future reference, we have prepared the following table of the New-York prices of leading articles, on the 20th of each month during 1861. For the average of the whole market at any time, we may take: for *Flour*, the highest quotations of "Extra State"; for *Wheat*, the highest quotations of "All kinds of Red"; for *Corn*, the highest quotations of "Mixed"; for *Oats*, the highest quotations of "Western." The average prices used above for flour, wheat, and rye, are higher than in the table below, because more of these three articles were sold at the higher than at the lower monthly figures.

NEW-YORK PRICES, ON THE 20TH OF EACH MONTH.									
	Flour.	Rye Flour.	Corn Meal.	Wheat.	Corn.	Oats.	Rye.	Barley.	
1861.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
Jan.	5 55	3 72	3 35	1 38	71	37	74	72	
Feb.	5 50	3 71	3 30	1 35	68	37	67	74	
Mar.	5 45	3 70	3 02	1 35	68	33 1/2	64	72	
April.	5 40	3 70	2 97	1 40	68	35	68	67	
May.	4 35	3 50	3 00	1 52	55	32	67	61	
June.	4 35	4 50	2 97	1 30	45	31	65	57	
July.	4 50	3 00	2 91	1 12	45	31	66	57	
Aug.	4 60	2 90	2 95	1 30	50	33 1/2	60	—	
Sept.	5 45	2 90	3 05	1 30	56	35 1/2	69	70	
Oct.	5 80	3 40	3 00	1 36	61	39	74	65	
Nov.	6 00	3 75	3 07	1 44	67	47	83	76	
Dec.	5 85	3 80	3 20	1 43	67	43 1/2	84	73	
Avg.	\$ 5 30	\$ 3 46	\$ 3 06	\$ 1 37	60	36	70	68	

In looking at the prices given above, the first suggestion perhaps will be, that these are far above those received by producers. But these prices have been paid here, and all the money paid has gone towards, and into the country—some to laborers on the lines of transportation, and some to dealers, all of whom live in the country or in interior towns, and spend the

proceeds of their labor there. The main point we aim at is, to show how much has gone to the country from this single City. Much of the amount paid for Breadstuffs has come to us again from over the ocean, either in return cash, or in cancelled debts owned to foreign countries, and by so much has this country been enriched.

The Tables in the Review are interesting also in the comparison they give with other years. Thus, the receipts of Wheat in 1861 were over twenty-eight million bushels; in 1859 they were less than four millions. Receipts of Corn in 1861 were over twenty millions, in 1859 less than four millions. So of Wheat Flour and of Rye.

The prospects for the future seem to be encouraging. We stated last month Dec. 20, (which by mistake was printed Oct. 20,) that we did not believe there would be war with England. The prediction has, happily, been confirmed. There is no present prospect that the outlet to our farm produce, to the hungry foreign markets, will be interrupted. All the Breadstuffs we can spare will doubtless be wanted before the next European harvest, and the avails will add so much more to the actual wealth of this country.

Sandwich Island Agriculture—Interesting Items.

A subscriber (Joel Bean, a Missionary of the Society of Friends,) at Honolulu, the chief city of Oahu, and the capital of the Sandwich Islands, in a recent letter to the *American Agriculturist*, gives the following interesting items: The only land suitable for cultivation on these Islands is the narrow border, varying in width from one to ten miles, between the mountains and the sea shore. Most of this is at present pasture land, and plentifully stocked with cattle and horses, and some sheep and goats. It is said that on the Island of Oahu, there are as many horses as people. This almost universal grazing of the land, increases its parched appearance during the dry summer months, and in some places the rains have sensibly diminished, since the cultivation of the ground ceased. The stranger is struck with the very small proportion of land under tillage, and wonders how the people are fed. But the native population subsist principally on *Taro*, of which their little patches are to be seen around every village. This plant yields abundance of food. [The *Taro* is a plant of the genus *arum*, having leaves like the water lily, and large, thick, oblong roots, which are baked and used as food.—Ed.] A little corn is raised, together with Irish and sweet potatoes, melons, and small quantities of garden vegetables. On the island Mani, wheat is raised, and there are several large sugar plantations. But wheat is an uncertain crop, on account of worms, and a portion of the cane which requires in some localities two years to mature, is now quite ruined by the drouth. The present neglect of agriculture has grown out of a dependence on the whale shipping, which a few years ago was a very great source of income, but since that business has diminished to a great extent, those in authority and others interested in the prosperity of the Islands are being aroused to the necessity of developing their own resources. Hence, strenuous efforts are now being made to introduce cotton growing on a large scale, and to interest the natives in its culture. But little of the land is fenced or under cultivation. The principal material for fencing is stone; in some places wire is used; and now and then a lot is enclosed by a hedge of prickly pear. The cultivated fruits are: bananas, papia, figs,

grapes, etc. The wild fruits are ohias (native apples), ohelos (a kind of huckleberry), pohas, strawberries, bread-fruit, guavas, and some oranges in the mountains, but none of these fruits are abundant, except bananas, which are of more general production than any of the others.

Farmers be Sociable.

The position and duties of farmers somewhat hinder their sociability. Scattered over the hills and valleys of the country, often miles apart, and engaged in solitary field labor, day after day, and month after month, it is not so easy to keep up much intercourse with general society. Mechanics, merchants, manufacturers, and professional men, naturally concentrate in cities and villages, where they can enjoy a daily exchange of opinion and information, and pleasant courtesies. This stimulates thought, awakens ambition for improvement, and adds much to the general happiness of life. The longer farmers live in a solitary way, the less likely are they to change their habits. It is not surprising that in many cases they become stiff and awkward in their manners, dull in intellect, and ungenial, if not morose in feeling.

But we are not, on this account, going to depreciate the farmer's lot: it is, in many respects, the best under the sun. Yet it can not be denied that evils lie in the direction we have indicated; and they should be guarded against. It is not a good thing for anybody to make a slave of himself: to jog around as in a treadmill, year after year, with little or no relief, or rational enjoyment, and the farmer should not follow his work too doggedly. We would not have him drudge so hard that he can not enjoy the society of his family every day. He ought to be the leader and benefactor of his household in their social intercourse. His conversation at the table, and around the evening lamp, should be instructive and elevating to sons and daughters.

His genial hospitality should attract neighbors and friends, to visit him often and enliven the converse of the fireside. And he, with his family, should systematically keep up acquaintance with other good families, far and near.

The Farmers' Clubs, which are established in many districts, exert a good social influence so far as they go, but they are not enough; the intercourse of families should be superadded, as this contributes very much to the enjoyment and respectability of agricultural life. It lightens the burden of daily toil, relieves its solitariness, awakens thought, and promotes general improvement. Where this is done, farmers' children, both sons and daughters, will be less inclined to long after the excitements and gayeties of town life, and more of them will be content with the calling in which they were born.

Apple Juice for Dyeing.

According to English Journals, the discovery has been made by Manchester dyers and calico printers, that apple juice is just what has long been wanted for making fast colors of some descriptions on printed cottons. Numbers of them have been through the adjacent counties buying up the apple crops which have heretofore been used for cider, at advanced prices, and a scarcity of the latter article is apprehended. Our own enterprising dyers and calico printers have already made the application and it is used as a substitute for argols and cream tartar in various processes. The state in which cider is of most value is hardly yet definitely ascertained—whether as new cider, hard cider, or vinegar,



POULTRY AND PORK.

Engraved for the American Agriculturist.

Our artist has sketched a picture not uncommon among American farm scenes. No farm establishment would be complete without its poultry yard, and its piggery. The frugal housewife well knows the advantage of a basket of eggs for the Store, to be returned in a few yards of muslin or calico, a spool or two of thread, a packet of tea, and sundry other "notions." She has received many six-pences and shillings of "pin-money" from the peripatetic chicken merchant. She fully appreciates the convenience of plenty of fowls in the roost, always ready to be drawn upon for an extra dish, when an unexpected friend arrives. Her poultry are therefore sure to receive their regular rations, whether the vegetable and flower garden be neglected or not. The artist has introduced into the back-ground the never absent trough and feeding porkers. The two objects suggest the inquiry, which *pays* the best, poultry or pork? Much may be said on both sides of the question, but as a rule we should decide in favor of poultry, notwithstanding the argument, considered as unanswerable, viz.: that the pigs will consume and turn to profitable account a large amount of garbage that no other animal will eat. This is an error. Barn-yard fowls will devour almost every species of garbage that the porkers will not turn up their noses at—*salt* kitchen slops excepted. The only serious objection to poultry is, that they do not flourish well when kept together in large numbers. But this objection is without force on most farms where

only a hundred fowls, or so, are kept, and around the thousands of smaller homesteads, where a pig is considered necessary as a scavenger. It seems not to be understood that fowls are preferable for the same purpose. We will let a subscriber's speak. Here is part of a letter just at hand from J. C. Thompson, of Staten Island:

"Most families in the country, and on the outskirts of cities, think they must keep one or more pigs, to use up the offal of the family—or because it is the 'custom of the country.' Having tried pigs, and become disgusted with the trouble, labor, expense, filth and noise—to say nothing of the inferiority of pork to eggs and poultry—I abandoned the former for the latter; the result has been quite satisfactory, and after several years trial, I feel confident the advantage is decidedly in favor of poultry. Here is my last year's account:—January 1, 1861, stock on hand, 70 fowls, of which fifteen died during the winter, from unknown causes, leaving me 52 laying hens. From these I obtained in January, 409 eggs; in February, 439; in March, 681; in April, 959; in May, 835; in June, 801; in July, 719; in August, 603; in September, 421; in October, 333; in November, 286; and in December, 440. Total, from 52 hens, 6,925 eggs—equivalent, in bulk, to seven barrels, as a barrel packed for market contains just about 1,000 eggs. About 8 eggs from the Leghorn or Black Spanish breeds, weigh a pound. My 6,925 eggs therefore weighed 865 pounds. Allowing the hens to

weigh 5 pounds apiece, they each laid, on the average, *three times* their weight in eggs alone. As they hatched full a hundred chicks, the weight of which, when ready for the table, must have been 1½ pounds each, the whole amount of food produced was over a thousand pounds, notwithstanding I killed off part of the old stock in June, July, and August, depending on the Spring-hatched chicks, which began to lay in August, to keep up a supply of eggs and replace those killed off. When we consider the amount of food (of the very best kind) produced in one year, from so small a stock to start on, and then, too, the stock left *whole* at the end of the year—the advantage of poultry over pigs can be seen at a glance.

To produce 1,000 pounds of pork, will require a vast amount of labor, a vast quantity of food, and any quantity of noise—giving fresh food for only a short time, and salt food for the balance of the year—and the stock not left whole to start on again, as in the case of poultry. The product in eggs was more than 6,925, perhaps over 7,000, as I detected a boy that had access to the hen-house for some time, in stealing them. The number named was actually collected. My stock is principally Leghorn; and it now costs \$3 per month to feed 75 head. As some may desire to know *how* the hens are managed, I send a brief description." [We will try to find room next month for the details of Mr. T.'s practice; it is well to know first *what* is done, but the *how* is not less important.—Ed.]

Maple Sugar.

The maple sugar season is just upon us. Always important as it is, this year it is more so than ever. The high price of cane-sugar makes it a costly luxury, to be indulged in sparingly. Moreover, it will do us northerners no harm to be thrown a little more upon our own resources. With the maple-trees and the sorghum plant, we shall get along quite comfortably.

The "sugar-bush" should always be securely fenced in; it is a great annoyance to have one's buckets visited by roving cattle during the night. The apparatus used may be of the rudest kind—the "buckets" mere blocks of wood dug out with an ax, the sap boiled down in kettles hung on a cross-bar in the open woods—but then, the molasses and sugar will be rude, too. We can easily do better than that.

First—the conveniences for boiling down. Build an "arch" of brick and mortar, in size corresponding to the extent of the bush. On this, large pans are to be set for evaporating. Two or three cross-bars of iron are to be laid across the opening, to prevent the pans from sagging down. The pans should stand exactly level. Any tinner can make the pans, using Russia iron, two sheets riveted together with sides 5 or 6 inches deep turned over $\frac{1}{2}$ wire, and provided with handles. When more than one pan is used they should be set on the same arch, each as much as its own depth higher than the other, so that the sap can be drawn, if desired, through faucets, from the highest into the lowest. If this arch is under a large shed, it will contribute much to the comfort and cleanliness of the work. Provide good dry wood.

For tapping the trees, use an auger $\frac{1}{4}$ to $\frac{1}{2}$ inch size, and bore holes from an inch to one and a half inches deep, merely cutting through the bark and sap-wood. A deeper hole strikes into the heart-wood and begets decay. By tapping three or four feet above the ground, the sap is kept quite free from flying leaves and dirt.

Various kinds of spouts are used. Those made of tin or sheet iron are in high favor with some. They are about two inches wide and six inches long, rounded up eaves-trough fashion, and one end sharpened with a file, or on a grindstone. It is then driven into the bark just below the auger-hole, using a wooden mallet for driving, to avoid battering it. Others prefer wooden spouts, made of pine or hard wood.

Buckets are sometimes made of tin, others of pine, and others of cedar, the wooden ones being hooped with iron or ash, and painted. These are suspended either on the end of the spout (bad practice), or upon a large nail or hook driven into the tree.

For collecting sap, some still practice carrying the buckets by hand to the kettles or pans; some conduct it by shallow troughs to a large reservoir at the center of the bush. Others collect the sap by pailfuls; in a cask or vat drawn upon a sled or stone-boar.

Sugaring Off.—This is an easy process. When the sap is boiled down to a syrup, strain it through a clean flannel strainer into a medium sized cauldron, and boil it until it granulates. If leaves, pieces of bark, ashes, flies, or dirt of any kind has fallen into the sap, it must be clarified. This can be done by using milk, or saleratus and the whites of eggs. A good recipe is a half tea-cup of new milk to every pailful of syrup. Then boil slowly and stir well together, skimming off the scum which will soon rise to

*An "arch" in sugar-boller's phrase means simply brick or stone-work to support boilers, kettles or pans.

the surface. This done, and the syrup being found "dry" enough (by testing a little in a saucer) to make into forms, pour it into tin molds of any convenient size or form, and when solid, lay the cakes upside down to prevent premature draining. At the first leisure moment, lay the cakes on their edges with dishes underneath to catch the drainings. The cakes will soon harden.

A practice of tapping maples with the ax, hatchet and gouge, is in some sections alarmingly prevalent. It is certain ruin to any maple grove, and the price of sugar at the present time should convince farmers of the great value of a good sugar bush. In a recent letter to the *Agriculturist*, a farmer of Florence, Ohio, writes, deploring this waste, and describes the common "tap" used by himself and others. Here is a drawing of the simple implement, with his description: "Take first quality, straight grained, inch pine boards, cut them in foot lengths, and



split them up into one inch square pieces. Two inches from one end saw half-way through, and split off the ten-inch piece. Bore a quarter inch hole into the larger end, lengthways of the tap, and cut a groove from the hole to the other end. In the absence of a vise, to hold the stick to prevent splitting, burn the hole out with a hot iron. To fit them, bore a $\frac{1}{4}$ inch hole in a hard wood block, and whittle down the square ends of the taps, just to fit, but not to enter it. When driven into the trees, they should hold fast when inserted an eighth to a quarter inch only; if driven in deeper, they cut off, in part, the flow of sap.

It is a good practice to deepen the holes in the trees by several successive borings during the sap season, in order thus to clear out the mold, and keep the holes sweet and pure; but never sink a hole deeper than two inches; no increased flow of sap is gained. A three-quarter inch hole will often close up almost entirely in one season.

A Talk About Sorghum, or Chinese Sugar Cane—Interesting and Instructive Details of Experience.

The present high price of sugar, with the prospect of a further advance, very naturally awakens increasing interest in the cultivation of the Sorghum, or Chinese Sugar Cane plant, in the North. Very many letters of inquiry are continually coming to this office, and we shall gladly give any information we can gather and communicate. Thousands of acres were grown during 1861, and manufactured into good palatable sweetening. The crop will doubtless be increased to tens, if not hundreds of thousands of acres, the present year. It seems to be settled beyond doubt, that this plant can be profitably grown in the United States below 41° north latitude, and probably even north of 42° or 43°, in favorable situations. We shall be glad to hear from all who have tried it thoroughly (whether successfully or not,) north of 43°. Perhaps we can not do better in this number than to print some memoranda or notes taken down by one of the Editors of the *American Agriculturist*, during a recent lengthy conversation with Mr. E. A. VanMeter, who has had considerable experience, both as a cultivator, and in working it up in large quantities, for his neighbors, in Washington, Tazewell County, Ill., (lat. 40° 30'.) We have samples of

the syrup produced, which are of excellent quality, and which need no purifying for ordinary table or culinary use. It is indeed free from the green or sharp taste which is so common.

MR. VAN METER'S EXPERIENCE AND OPINIONS.

The plant does well upon any good corn land, and the expense of cultivating the two crops, aside from the cost of the seed, which is inconsiderable, is the same. A rather light soil—sandy loam—other things being equal, produces juice of the greatest richness. In regard to seed, it is of the utmost importance to have pure Chinese Sugar Cane. The Imphee, in his experience, is three weeks later, and produces syrup of by no means so good quality, and less in quantity. The admixture of broom corn seed is not infrequent, and is fatal to a good crop, there being little or no sweetness in the stalks. Sorghum may be planted in hills three and a-half feet apart each way, or in drills the same distance apart—the plants standing singly eighteen inches to two feet apart, and the suckers allowed to grow. If planted in hills, five stalks are left in each, and the suckers thoroughly removed. He decidedly prefers planting in drills, and thinks that this has much to do with the good results of the crop. The seed should be planted as early as the ground can be prepared, and is fit for its reception—earlier than corn. The practice of a neighbor is to sow in an early seed bed, and transplant to the field, setting the plants two feet apart in rows, and the rows three and a-half to four feet apart. This man's syrup crystalized so readily that he was obliged to make it all into sugar, and was unable to take even a sample of his molasses to the County Fair. It is the largest, best grown, and best matured stalks that yield the most and best syrup. Some juice yields seventeen per cent. of good thick syrup, and others only ten per cent.

The crop is treated like corn until it begins to ripen, which may be known by the cane turning yellow upon the joints towards the butts, and by the blackness of the seeds. At this period it should be "bladed," or stripped of its leaves, to facilitate perfect ripening. To effect the "blading," take a hickory stick, one-and-a-half to two inches in diameter and three feet long, slip on a ring, or bind it strongly within fourteen inches of the end; split this end in the middle, and spread the ends two inches apart, by a wedge in the split. This saves a great amount of labor—a single blow usually blading a stalk, and often more than one, perfectly. The blades thus removed are considered equal to corn fodder, not having been touched by the frost, and are easily cured. The bladed stalks stand after this two weeks or more, unless danger of frost makes it necessary to cut them sooner. Freezing is ruinous to the cane, giving a peculiar flavor to the syrup, and causing fermentation in the cane itself, unless pressed immediately. It must, therefore, be cut before any hard frosts—though light frosts, which wither the leaves, do no hurt.

When fully ripe, the cane should be cut, which operation is thus performed: Using a corn knife, strike off about three feet of the top as it stands (the length to be cut off will vary somewhat, according to the size and maturity of the cane). Then cut the cane off about eight inches from the ground, or at least above the first joint, and lay in piles or on the wagon. There will usually be suckers enough to bind the cane in bundles if it is desirable, or if it is to be hauled far. After the removal of the stalks, the seed may be collected, or fed to hogs or poultry on the ground. The canes are taken direct-

ly to the mill, or set up or laid in piles, and protected against frost by covering them with the tops, or with hay or straw,—in which condition they will keep for months.

The mill used was Hedges, Free & Co.'s two-horse mill—a good one—consisting of three rollers thirteen inches long, the largest and upper one eight inches, the others four inches in diameter; both small rollers act against the large one. From eight to thirteen canes are kept passing through the mill at once, and as the juice flows out it is conducted to the “clarifier,” being as liquid as water, and of a dark grass-green color. (Imphee juice is of a dark, muddy hue.) In the clarifying pan it is mixed with Root's patent “clarifiers,” (a mixture of lime, soda and eggs.) After clarifying, the juice is boiled and skimmed for fifteen minutes. From this it is drawn off into the settling box, where, mixed with clay, it stands to settle, and after fifteen or twenty minutes, may be drawn off clear and limpid, into a convenient vessel, whence it is pumped up into the evaporator.

Cook's evaporator is used, in which the fire plays under an inclined pan, down which the juice is made to run, following a zig-zag course, running faster or slower, according to the inclination of the pan, or the rapidity at which it is allowed to flow in or out. Water is placed in the evaporator to begin with, and in twenty to twenty-five minutes after the juice begins to flow in at one end syrup begins to flow out at the other. By the exercise of a little care, there is no danger of burning the syrup; but the care must be constant. A uniform product is most desirable. The syrup should not be too thick, for it will not flow readily from the barrels if it is so, and this great degree of concentration is not necessary to prevent souring. The mill runs about sixty gallons an hour, and sixty gallons is a charge for the clarifier, and so about this quantity was worked at one time.

Mr. Van Meter made syrup for half the product, and found ready sale for his portion at the mill, as fast as it was made, at fifty cents per gallon, and had no end of orders which could not be filled.

One hundred gallons to the acre was about an average yield last year for land adjoining corn which yielded fifty bushels to the acre. The Sorghum syrup, at fifty cents per gallon, half going to the boiler, nets the farmer \$25; while corn only sold for fifteen cents per bushel, netting \$7.50 per acre.

For ourselves, we entertain no doubt that the boiler's profit will be found too great by and by, and so a still larger profit will accrue to the farmer. We have reports of crops yielding from 100 gallons to 350, or even more, per acre.

P. S.—A SORGHUM CONVENTION.—As we close this sheet, we have from a special correspondent, a report of the meeting of Sorghum Growers, at Columbus, Ohio, Jan. 7, but cannot now find room for it. They appear to have had a good time, with their fifteen samples of beautiful Sorghum sugar, and “Sorghum syrup enough to float a [very] small frigate.” Many reported having made 10 to 100 pounds each of sugar last year. Most, if not all, had used Cook's rocking Evaporator. There was considerable information brought out during the discussions and relations of experience. These referred more to harvesting and manufacturing than to planting, and will be in season hereafter. One point stated is important, viz.: that most of the seed now in the country is hybridized with broom corn, and is therefore deteriorated, making a new importation of seed desirable.

Tim Bunker on the Value of Muck.

“Ha'int you got most tired on't, squire?” asked Ben. Jones, as I carted along my twentieth load of muck last night.

“Guess not. Why?” I replied.

“It's a mighty deal of hard work for nothing. I'd just as leevies have so many loads of snow banks in a barn yard.”

“It's all moonshine about there's bein any var-tu in muck. I'd jest as soon dung a field with icicles,” chimed in George Washington Tucker, who gets his ideas and his drinks from Jones.

“Them's my sentiments exactly,” said Jake Frink, as he met us in the road with a load of oats in bags, going down to Shadtown to market. “You see I was overpersuaded one year, when the Squire bo't the hoss-pond lot, to try some of the mud that come out of the side of the road, where the pond used to be. I guess I carted a dozen load, and thought I was going to see corn stalks as big as your wrist, and ears as long as a hoe-handle. And I du declare I never could see a bit a difference where I used it.”

“How much manure did you put on to the acre?” inquired Seth Twiggs as he drew a lucifer across the top of his boot, and lighted his inevitable pipe.

“Wall I made a whoppin sight that year, and slapped her on ten loads to the acre.”

“Corn must 'av been skeer'd at such duin's I guess,” said Seth with a twinkle in his eye that the cloud of smoke could not hide.

“Corn didn't come up well did it?” asked Seth, pursuing his catechising.

“Wall, yes, it came up, but looked mighty yaller, and didn't begin to grow much till into June, and then it was spindlin, and a great many stalks didn't have any years on 'em. It was that cold frog mud that pizened the sile.”

“How much corn du you git to the acre, take it by and large, Mr. Frink?” asked Seth civilly.

“I guess about twenty bushels, on an average, some times a leetle more—and some times less.”

“And how much manure do you put on to the acre?” continued Seth determined to get to the bottom of the matter.

“Wall that is jest as it happens. I allers put on all I make, be it more or less, p'raps fifty or sixty loads on to eight or nine acres of plantin. It's real dung, though, and none of your bog moss, and stuff.”

“And how do you suppose Squire Bunker gits eighty bushels of corn to the acre?”

“Wall, his land allers was better than mine; and then he has more cattle to make more manure, and he buys lots of guanner and bone dust, and all the ashes folks makes in the village, and sets every boy that's big enough to run on tew legs to pickin up bones, and buys every ded hoss and rotten sheep, and murdered cat, shoe maker's parin's, old boots, ded hens, old rags, and feathers, sticks 'em into this muck, and makes manure. If a man has money 'nuff to buy carrion, he can make manure and make crops, but ye see it costs more than it comes to. And then, who wants to be runnin an opposition line to the crows! The Squire is great on dead hosses, depend on't. The crows haven't had a decent meal of vittles the last five years, the Squire's been so spry after every ded critter.”

Jake Frink touched up his nag and disappeared rather suddenly after this display of his philosophy of big crops. There was, of course, some foundation in truth for his reflection upon my methods of making manure. But neighbor Frink displayed his own pride, as well as my

humiliation, in his remarks. One would hardly think it. But Jake Frink is really above his business, and is ashamed to do what ought to be done, to make the most of the materials within his reach to enrich his stores of manure. You see this digging muck is nasty business. You must soil your boots, and your shirt sleeves, and a splash of mud upon your shirt bosom is not uncommon. And the handling of dead horses and other diseased animals is not particularly savory. But then if a man's going to be a farmer, he musn't faint at the sight of such things, or carry a smelling bottle to keep down the stench. Muck makes *clean* corn, yellow as gold, and the sweetest of meal, and all offal and putrid flesh in the laboratory of the soil is turned into luxuriant grass, which makes nice milk, cheese, and butter, and a plenty of it. Being a farmer, and “nothing else”, as the boys say, I go in for muck and more of it every year.

You gentlemen that edit agricultural papers, attend the fairs and see almost nobody but the best farmers, who carry out your teachings, think the world is almost converted to your faith. You have been preaching about muck for a dozen years or more, and you may think that every body understands it and every body uses it, and as much as they ought to. You never made a greater mistake in the world. I tell you the millenium hasn't come yet by a long shot. I guess one half the farmers in these parts to-day, have got Jake Frink's notion about muck, and it rests upon just his sort of trial, a single experiment based on an application of ten loads of half made compost to the acre. No wonder muck is considered poor stuff.

Now I am ready to give a reason for the faith that is in me. On my old land I can not make any money at farming without manure, and carting muck is the cheapest way I can make it. Indeed I should not know what to do without swamp muck. Manure, as it is sold in towns and villages in the Northern States brings from two to three dollars a cord of 103 bushels. As it *brings* this price it is to be presumed that it is worth this to the cultivators who buy it. These are generally market gardeners and farmers who live within four or five miles of market. If manure is worth this to the farmer who has to cart it several miles, it is certainly worth as much, or more, to the farmer who makes it and uses it upon his own farm.

Now I claim for the muck and peat that I use, that I make a dollar upon every cord that passes through my yard and stables on its way to the plowed fields where it is turned under—reckoning its value at the lowest market price, two dollars a cord. The peat as it lies in the bed yielding no income, is entirely worthless. It can be dug and thrown upon the bank of the ditch for twenty five cents a cord. If it can lie a year, all the better, but this is not essential, as fresh stable manure will cure it without frost. It can be delivered in my yard for fifty cents a cord, but it would cost those who have to cart it half a mile or more, perhaps seventy five cents a cord, making a dollar. Dry muck in the process of mixing and curing during the Winter, would be certain to lose neither in weight nor volume. In the Spring it is worth two dollars a cord as it lies in the yard. In making compost I calculate to use about three loads of muck to one of stable manure. If I have animals enough to make a hundred cords with nothing but straw, I can make four hundred with muck.

On the muck that I am able to cure in the fields where I use it, I make a still larger profit, as I save once carting. This I cure with stable

manure that I buy from the village, and with fish, dead animals, guano, or with lime and ashes, taking care not to use these latter articles with the animal manures. If any body doubts about my estimate of muck let him come to Hookertown and see my corn bin and porkers, my root cellar and cows, and my hay mows and horse stables. Jake Frink despises a dead horse and invokes crows. I think the carcass worth a "V," and save it. There is as much difference in folks as in any thing.

Hookertown,
Jan. 11th, 1862.

Yours to command
TIMOTHY BUNKER, Esq.

Carting Manure in Winter.

Farmers accomplish much more in the winter months than they formerly did. The custom of going into Winter quarters after Christmas has passed away upon many farms, to the mutual advantage of the owner of the soil, and of his laborers. The working force of the farm is continued through the whole season, and the management is so skillful that there is always something to be done that will pay. In the older States, manure making occupies a prominent place. Indeed it may be said to be the foundation of the new order of things, for without this, it would be impossible to furnish profitable employment in winter for the whole amount of labor needed in summer.

With this as the chief business, there is always work in rainy weather, in the barn cellar, or under the sheds, making compost; and the frosty weather when muck can not be dug, is improved to cart manure where it will be needed for the next season's operations. The idea that manure wastes when spread upon the surface of the meadow, or plowed field is exploded by these farmers. If the land lies level without danger of washing, they spread freely from October to May, without any apprehension of loss. The ammonia generated from the green manures is pretty well locked up in the muck with which it is mixed before it is started from the barn cellar or yards. The already fine compost is made still finer by the frosts of winter and is evenly distributed over the surface of meadows.

A very great advantage of using this season for carting, is the improved condition of the ground. The cart-way is as solid as a railroad, and almost as smooth, and a large part of the obstructions that impede the wheels is removed. The meadow is not cut up into ruts, or made rough by the hoof prints of cattle. It is much better to top dress meadows now, than to wait until Spring. It is also an advantage to cart out manure upon the fields which are to be plowed. The drawing is done more economically, it forwards the spring's work, and saves strength of team for plowing and other work that must be done in its season. JONATHAN.

How to Haul Stones and Manure.

The stone boat, or "drag," so generally used, is the most expensive method. The most that can be said in its favor is, that it is so simple in its structure that any body can make one after the planks are sawed, and that it is very convenient in loading and unloading the stones. But after the stones are loaded we want a team of elephants to draw them. It is severe on oxen by reason of the heavy strain it brings upon them. The friction upon the ground, unless covered with snow or ice, is immense. And if the ground is lubricated with frost it is a dangerous vehicle unless the surface is level, as it is very liable to

run against the legs of the cattle. We have known of a fine yoke of oxen permanently disabled in this way. Stones should be moved upon wheels if we consult the welfare of our teams. A yoke of cattle will draw a ton upon broad tire wheels with about the same ease as they will draw one quarter of that weight upon a stone boat—a great saving of muscle.

For moving very large stones of five or six tons weight, and putting them in place in a wall, there is nothing we have yet seen or heard of, quite equal to Bolles' Stone digger, (described and illustrated in the last December *Agriculturist*). But as this is somewhat expensive and not yet in general use, a very convenient carriage for stones is a platform suspended between the wheels of a wagon. The platform may be 10 to 12 feet long, and of the width of a wagon body. It may be made of strong plank, or joists, bolted or spiked upon cross-pieces. This is suspended by short stout chains from the fore and hind axles, down to within a foot of the ground, or less for a level surface. To facilitate turning, the forward end may have but one chain in the middle, which will allow the forward wheels to turn readily to the right or left. The platform may hang mainly upon the hind axle, in which case the rear may be nearly as wide as between the wheels, and the forward end run out nearly to a point. The wagon can then be turned round in a short space. The two chains on either end of the hind axle will prevent its tipping. The hind end can be tipped down to the ground for rolling on a very large stone, which can then be balanced by smaller stones thrown on in front. Such an apparatus is quickly constructed, without the aid of a mechanic, except getting the bolts from a blacksmith. Any strong wagon may be used, and much larger loads can be drawn, saving not only wear of team, but not unfrequently expense for blasting stones that could not be moved on a drag or stone-boat.



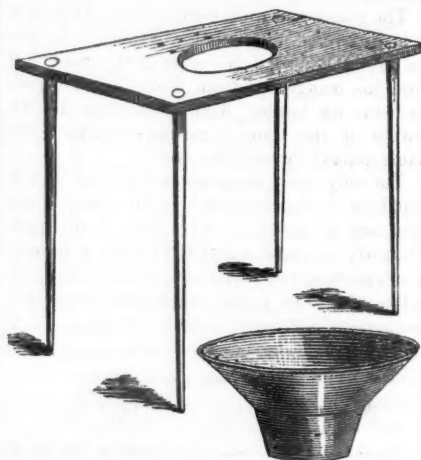
ANOTHER SIMPLE ARRANGEMENT.

We have seen in Belgium, and in the north of France, a very simple arrangement for hauling stones, manure, etc. Two chains are suspended, one fastened to each end of the front axle and the other to each end of the rear axle, and narrow planks, joists, or poles, laid on as shown in the annexed cut which we draw from memory. To unload small stones, or manure, it is only necessary to seize the rear end of the planks, which are pointed for this purpose, and lift them one by one, letting the load drop through. This plan saves lifting the whole mass of stones or manure up over the sides of a wagon. The hint is worth acting upon, and it is a wonder that we have not thought of describing it in the *Agriculturist* before now, or that some one else has not done so.

A Cheap Home-made Bag Holder.

Mr. Thomas Sheldon, of Hazardville, sends to the *Agriculturist* a description of a bag-holder of his own contrivance, which has been in use at the Hazard Powder Mills several years, for filling bags with saltpeter. It has at least the merit of being simple, easily and quickly made, and is unpatented. The accompanying sketch, made partly from the description, and partly from a

pencil made by Mr. S., will show its form and operation. A board, say 14 by 24 inches, is fitted with legs of any desired length. These may be fastened like an ordinary table, or be merely rough sticks, fitted into auger holes, to be taken out at pleasure for packing away. In the center of the board a round hole is cut, say 10 inches in diameter. A tin or sheet-iron



funnel fits into this closely. To use it, the mouth of the bag is slipped over the funnel spout, and the bag let through the hole. The funnel, on being pressed down, holds the bag so firmly that it will not slip out, even when filled, without the bottom coming down to the floor. The funnel neck should be much less flaring than shown in the engraving, or it will not wedge in the bag so strongly. This would seem to be a good apparatus, costing but very little, and requiring no cash outlay, except for the funnel.

Is it the Glanders?

A young farmer writes us about a fine young horse of his, which has some symptoms of glanders, and wants to know what the real trouble is, and how to deal with it. His horse runs at the nose, has some soreness about the jaws, is feverish, loses gradually in flesh, and is disinclined to work.

These, indeed, are among the symptoms of glanders, but a horse may have them all without having the glanders. The decisive marks of this disease are as follows: At first, there is an increased discharge of watery matter from the nostrils, which has a little mucus mixed with it. It generally flows first from the left nostril. It is not thick and sticky, as some say, but it becomes so after passing the first stage. Now, it becomes contagious, and the infected animal should be removed to a separate barn or pasture. If the disease is not now checked, the discharge begins to contain pus, and the glands of the nostrils and under jaw become enlarged. The membrane of the nose becomes of a dark purplish or leaden color, and small ulcers break out upon it. At this stage, the general health of the horse begins to fail. He loses flesh, his hair becomes dry and sheds off, he has a poor appetite, an occasional cough, the discharge from the nose becomes bloody and offensive to the smell, and the breathing labored. Tumors soon appear on the face and neck, and inside of the thighs, the hind legs swell and become hot and tender, and the whole animal becoming overcharged with disease, succumbs and dies.

A simple hard cold, or catarrh, or strangles, may sometimes show itself in the form of nasal discharge, fever and loss of appetite, and swol-

len throat, but these will soon pass off, under kind treatment.

The glanders is one of the worst and most fatal of diseases. It is sometimes inherited, and at others communicated by contagion. It sometimes comes from bad stable management, especially bad ventilation. Want of regular exercise, over-work, everything that tends to break down the vitality of the horse tends to induce glanders.

The glanders is quite contagious. As soon as it is discovered upon a horse, he should at once be put by himself. No other horse should eat from his manger, or drink from the same pail, or wear his bridle. And, worse than all, the owner of the horse sometimes contracts the same malady by handling him.

The only useful remedies are those which will build up the general health of the horse. Turn him out to pasture. Give him light work. Properly managed, a glandered horse will sometimes do moderate service for several years; but when the disease is once established, a real and permanent cure is not to be expected.

For the American Agriculturist.

Horse Coverings and Their Use.

Some good horse-men blanket their horses all the year, while others discard their use. The advocates of the former practice claim that blanketing imparts a sleek and glossy appearance to the coat, effects a saving of food by keeping up the animal heat, protects them from flies and dust, making the grooming easier, and preventing a sudden check of perspiration, which would result in colds or other diseases. Assuming that nature gives the horse sufficient protection, and that whatever increases the labor of tending him without an equivalent gain is to be avoided, too much is claimed. His coat receives an additional gloss from the blanketing, but a horse in good health, well fed and faithfully groomed, wears a coat that needs no polishing. All the food saved by blankets, I think, can be better estimated upon paper than seen in the measure. Were there material gain, it would be economy to blanket our cows and oxen.

Constantly wearing the blanket tends to make a horse sensitive, and liable to take colds. When a horse brought from a warm stable, is stripped of his thick blanket, he undergoes a sudden and great change of temperature. Such treatment seems harsh, if not cruel, at any rate quite the reverse to the course men pursue. When we go out in cold weather, we are very careful to put on extra garments, and then lay them aside while in the house. What would be said of the man who advocated wearing overcoats in the house, and going in shirt sleeves while out of doors. Precisely similar is the practice of always keeping a blanket on a horse in the stall.

As with men, so with horses, the same regimen is not applicable in the same degree to all classes. For those horses which are used only for fast driving, the constant use of the blanket may be advisable and practicable, for they stand in the stable the greater part of the day, and when taken out, they are either heavily blanketed, or their exercise is severe. It is by the owners of this class of horses that the practice is most strongly recommended. But for horses of all work, out every day in all kinds of weather, warm stalls with plenty of bedding in a warm barn are sufficient. Wide cracks between boards near the stalls are not approved means of ventilation in a New-England climate. A barn may be warm and tight, and at the same

time well ventilated. The stalls should be upon the warm side of the barn, with high and tight sides, affording double protection. Influenced by such views, some extensive owners and excellent managers of horses in this vicinity have made their stables warmer, thus dispensing with the constant use of blankets in doors.

It is in their occasional use for preventing chills and colds, that their real benefit is found. Some sort of covering is indispensable for the health and comfort of the horse, when he is made to stand exposed to cold winds; and when he returns to the stable tired and heated, the blanket should be worn until he has cooled off; then remove it, and give him a thorough rubbing down. It is important that blankets should be of ample dimensions, for while exposed to cold, in a heated condition, the muscles of the breast and legs need protection as well as the back and sides; for this purpose blankets should be wide and long enough to pass around and fasten under the breast. A light and thin covering in fly time saves the horse much torment, and frequently saves the master serious runaways and accidents. The india-rubber coverings now becoming so common with express-men and others, who are obliged to be out in all kinds of weather, can not be too highly commended. The judicious use of blankets and other coverings in the ways stated, amply repays all expense and trouble. They prolong the days of many a hard-worked horse, and save him much suffering from stiffened legs and rheumatic muscles.

N. S. T.

Lawrence, Mass.

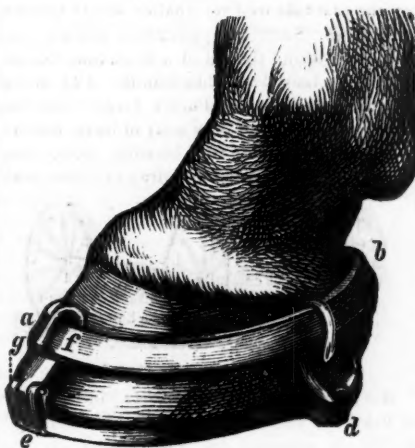


Fig. 1.

New Horse Shoes—Useful for Diseased Hoofs, and also for Instant Application in the Absence of a Blacksmith.

We have received from Germany, some accounts of a new form of horse-shoe, which would appear to be a very desirable improvement. It is patented in Austria, but, so far as we have heard, is free to the public here, and we take pleasure in presenting the accompanying engravings and description to the readers of the *American Agriculturist*. The shoe referred to is one which is applied to the hoof without the use of nails, and may be put on or taken off in a minute's time. One or more of these shoes can be carried by a person traveling, and be applied at once in case of the loss of a shoe, without waiting to reach a blacksmith's shop. They are especially adapted for use on such hoofs as will not endure the driving of nails, owing to disease, external injury, cracks or splits, brittleness, tenderness, etc., and are

particularly adapted to diseases of the sole.

DESCRIPTION.—In fig. 1, a, c, represent the shoe proper. Fig. 2 shows the bottom part. The outer rim is lighter than in the common shoe, and is strengthened by the cross-bars, which also serve as a protection to the sole of the foot. There may or may not be corks at the front and



Fig. 2.

rear points. On the front and at the two sides small flat hooks are placed, which turn outwards. A strong India rubber ring or belt, (fig. 1, a, b), $\frac{1}{2}$ inch broad, and $\frac{1}{4}$ inch thick, is drawn over the hoof, and into the hooks extending up from the shoe. As the upper part of the hoof is smaller, the tendency of the rubber ring will be to slip up, and thus hold the shoe on firmly. To adapt the shoe to hoofs of various forms, flat or receding, as well as upright, the front hook, at g, is made with a joint. To put on or remove the shoe, it is only necessary to stretch the rubber ring sufficiently to pass it over the bottom. For very tender, diseased hoofs, care is needed not to make the rubber ring so small in diameter, or so heavy, as to pinch the hoof too strongly. As shown in our engraving, the side hooks project so as to endanger interfering. Any ingenious blacksmith can avoid this difficulty.

Look to the Sheepfold.

Sheep will not wholly take care of themselves, accommodating as they are in this respect. Lambs need special attention. In the month of September, they should be separated from their dams, and put into the best pasture the farm affords; perhaps a few old and feeble sheep may go with them. The design of this is to bring them into the wintry season fat and hearty. If under-fed in autumn, they become weak and before winter is over, many will sicken and die.

When brought into the sheep yard early in Winter, they should have, not only a daily ration of good hay, but a little grain or oil-meal beside. Of course they should have good sheds into which they can retreat in stormy weather, and where they can lie at night.

In December, let the bucks and ewes be put together. If it is desired to increase several distinct breeds, divide the ewes into as many separate lots, and put them into separate pens or yards, with a select buck in each. They will all be served in three or four weeks.

The custom of some farmers to neglect providing good fresh water for sheep, is not commendable. They can, indeed, melt snow in their stomachs, and so can all animals if compelled to do so, but good, clean water would be better. By all means, look well to the sheepfold, and especially now, when the high price of wool makes this kind of stock unusually valuable.

Burning Corn for Fuel—Will it Pay?

From recent letters received at the Office of the *American Agriculturist*, and from sundry other sources, we learn that the farmers in some parts of Illinois are using their corn as fuel, in preference to buying coal and hauling it to their farms. At first, this does not seem to exhibit a prosperous state of agriculture—and, indeed, for the present it is not, for we can hardly claim that corn can be raised for burning with profit. The present, however, is a disturbed time. While multitudes of men and horses are at the war, and other means of transportation imperfect, as they necessarily are in all new countries, we cannot view it as arguing anything against the profits of farming in Illinois in ordinary times, because corn is now selling at only 10 cents per bushel. And is it possible that corn can, under these circumstances, be a more economical fuel than coal? Let us see.—There are districts in Illinois, and further west, where shelled corn will sell for only 10 cents per bushel. Allowing the corn to weigh 60 pounds to the bushel, 12 pounds for the weight of cobs, and 3 pounds for cost of shelling, we have 10 cents for 75 pounds in the ears. The cost of hauling to the railroad, where say 18 cents for 75 pounds is paid, is put low enough at 8 cents, if the distance is 20 to 30 miles; but if a load of coal is brought back, only half this ought to be charged to the corn. We may then deduct 4 cents per bushel from the price of corn on the farm, to show how much it would cost, used as fuel. This is 6 cents for 75 pounds of corn on the cob, or \$1.60 per ton. Corn properly dried does not contain more than 12 to 15 per cent. of water. Ordinary dry wood contains 20 per cent., or more. Therefore, 75 pounds of corn on the cob may be considered as equal at least to 60 pounds dry fuel—worth about \$3 a ton. According to analysis, this is all combustible, except 1½ per cent. of ashes; it contains 10 per cent. of oil, and the rest is starch, gluten, and woody fiber. Its value for fuel is less per pound than that of coal, but it is doubtless worth more than the best of wood, on account of its large amount of oil. It burns very readily, and if consumed properly, analysis would indicate that it must be worth at least two-thirds as much as coal. So that, with coal costing \$3 per ton, it is the cheaper fuel. This would make corn on the cob, at 18 cents per 72 pounds, after carting 20 miles, worth about as much as good hard coal, purchased at that distance from home, at \$3 per ton.

There are several other circumstances to be taken into account. When only transient fires are needed, the corn would answer a better purpose than coal, but for a steady Winter fire, the coal would be preferable. Coal of poor quality would be relatively dearer. Then, again, the question turns upon the price of coal, the distance of the markets for selling corn and buying coal, the condition of the roads, the surplus team and man help, etc. All the above calculations taken into account, it is probable that in some localities, and under some circumstances, corn on the cob may be the cheapest fuel.

But there is another view of the question. Beef cattle are worth 2 cents per pound, live weight, at almost any point in the distant West. Good, fat cattle sell in New-York, even in these depressed times, for about 4½ cents per pound, live weight. The best sell for about 5 cents, and 2½ cents per pound, live weight, will pay for driving, freight, care, shrinkage, and a profit, for bringing corn-fed cattle from Iowa. The

question then is, will not corn pay more than 10 cents per bushel if used for increasing the tallow and weight of cattle to be sent to Eastern markets? We think 60 pounds of corn will add more than 5 pounds to the weight of a bullock or steer. What say practical feeders at the West on this question? At the East, farmers feed to their beef cattle some corn, worth 50 to 70 cents per bushel, though they scarcely realize more than double the net price per pound for beef that is obtained at home by Western farmers.

(PRIZE ARTICLE)*

On Spring Wheat.

BY EDWIN REYNOLDS—FOND DU LAC COUNTY, WIS.

THE SOIL AND ITS PREPARATION.

The best soil is clay loam, with a gravelly subsoil, the surface overlaid with vegetable mold such as prairie, bordering on the burr-oak openings, common at the West. All clay soils of the West will bring good wheat for three or four years without manure, but it is better not to take off more than two or three crops without manuring. Barn-yard manure made on the farm is the best general fertilizer for wheat. When the land is much worn, two bushels of lime, and three of salt to the acre, is probably the best and cheapest fertilizer that can be used. Plow in the Fall from 4 to 10 inches deep, and sow on the lime and salt in Spring. Fall plowing often brings from five to seven bushels of wheat to the acre more than Spring plowing. Deep plowing is the best, as it lets the frost deep into the soil, preparing it for a crop the coming season, and destroying many seeds and insects.

SEED.

The best varieties known in the West are the Canada Club, and Canada Fife. The Rio Grande is an excellent kind for bread, but does not yield equal to either of the above named varieties. A variety known as the China, or Australian, is being introduced and promises well; it resembles the Rio Grande. That the entire harvest may not ripen at the same time, different varieties should be sown. First the Club, second China, third Fife. The sooner wheat is sown in the Spring the surer the crop, and the better the grain—another reason why the land should be plowed in the Fall.

SELECTION AND PREPARATION OF SEED.

Many ways are practiced. The best mode is as follows: Select the best and cleanest portion of the field, and let it stand until thoroughly ripe; cut and shock until quite dry, and thrash with a flail. (Thrashing with a machine often cracks the largest and best grains and destroys their germs.) The seed, though selected as thus directed, should be carefully prepared. The best way is to procure two barrels, two corn baskets, a wash-tub or a half-barrel tub, a large dipper, and a half bushel measure; also plenty of salt, and one ounce of blue vitriol to each bushel. Place the tub in a convenient place, and a barrel on either side. Make four to six pailfuls of strong brine in each barrel, with two ounces of pulverized vitriol to the pailful. Fill the tub with brine, leaving space enough for one half bushel of wheat. Commence washing by pouring a half bushel of wheat into the tub near one side, in a small stream to prevent the grain from carrying down the lighter substances to the bottom. Skim off with the dipper and throw the skimmings into the basket placed on the right-hand barrel. Stir and skim until you have cleaned your seed perfectly, then pour the contents of the tub into the basket upon the left-hand barrel, and let it remain there until another washing is ready, when it must be thrown in a pile on the floor. Fill the tub from the barrels and keep good watch of the bottom of your barrels to see that the supply of salt and vitriol is constantly kept good, as otherwise the brine will soon become so weak that it will not float the heaviest oats. The vitriol acts as a preventive against smut, and the salt will pay its cost as a fertilizer. This work can be done in stormy weather, as the seed will take no harm by lying in the pile for a week or more. Lime may be used as a dryer, but should not be mixed with the wheat until the morning you commence sowing, as it will eat out the chit if left too long. When washing keep account of the bushels washed, measure the pile when you commence sowing so as to know how much it has swollen, deduct

* The Committee found several very good articles among those presented for examination. This one seems to come the nearest to the requirements of the offered Prize.—The main defect in all the essays presented is, that they dwell too much upon processes common to harvesting, securing, and thrashing all kinds of grain, and too little upon the advantages of Spring wheat, the best kinds, suitable soils and their preparation, manuring, season of sowing, etc.—CHAIRMAN OF COM.

the foul mass in the basket, and by a little figuring you can ascertain how much it will require to the acre to use the same quantity as if dry. Seed cleansed in this manner does not require so much to the acre as when sown fith and all.

SOWING.

Should the ground be very uneven, it should be dragged down with a cultivator or thirty-tooth drag, in order that the grain may be covered evenly. Sowing with a seed drill is best, for the reason that it puts all the grain in at the same depth, whereby it all comes up at the same time, and ripens more evenly than when put in with a drag or cultivator. But all farmers are not forehanded enough to purchase a drill, and some must continue the old way of sowing. Many inventions for sowing have been scattered all over the country—some very good ones. I know of no better method than sowing broadcast by hand, as high winds prevail at the sowing season, and but few machines can be used in the wind to advantage.

The best method of sowing broadcast is, first to sow through with one hand then back with the other, always throwing with the wind. For instance: If the wind is blowing from the south go first to the east and throw with the right hand. Then pace off four paces or less, face about and sow to the west, shifting your bag and sowing with the left hand. The bag should be opened at the mouth by a hoop sewed into it; tie one lower corner to the mouth and sling it over the shoulder. A man can thus sow in any wind.

COVERING, HARROWING-IN, BUSHING, ETC.

A cultivator, in the form of a V, does very good work, but a still better one coming into use in these parts is, rectangular, three feet wide and eight feet long, with a cross-bar holding each tooth in its proper place, and furnished with a roller at each end. The ground should first be in a sufficiently dry state; as wet, clammy ground makes hard work for the team, and it is left in a poor condition for a crop. Sow from March 20th to April 15th, according to the lateness of the Spring.

Cultivate across the plowing, lapping one half, or use a thirty or forty tooth drag with the furrows, also lapping one half. The common practice of cross dragging will uncover more grain than it will cover up, therefore the dragging should be all done one way. To make the work complete, pass over it with a heavy roller. Where a roller can not be had, a brush drag made in the following manner, answers a very good purpose: Take a straight pole, five or six inches through, and bore holes about eighteen inches apart, into which insert bushes or small trees 10 or 12 feet long, with as branching tops as can conveniently be found. Then fasten a rope 16 or 20 feet long from one end of the pole to the other forming a bail, to the center of which attach the team. One horse can draw the drag, and a boy ten years old can drive it, and do the work. The pole mashes the lumps, and the brush whips the dirt into a fine state and leaves the field very smooth, and is better for land in a wet state than a roller.

AFTER TREATMENT AND INSECTS.

Very little is to be done after sowing a well cultivated farm. Clean out all brush or stones in the way of the reaper. Should the weather be dry, fields that were bushed may require rolling. This depends on the state of the soil. Should it appear too light and mellow, don't be afraid to put on a good heavy roller, even after the wheat is six inches high. When heading out, all oats and foul weeds should be pulled out, where it can be done without trampling down the wheat. A hooked knife attached to the end of a long pole can be used to a good purpose in cleaning fields, by walking through the dead furrows and reaching to the right and left cutting off the oats and foul stuff close to the ground, letting them fall in the grain, unless ripe enough to germinate, when they should be picked out and taken off. I know but little of insects, as nothing troubles our wheat but Chinch bugs. I know no remedy for these. Lime and salt may cure them as effectually as any thing. They evidently do not like the salt. Early sowing of the early varieties may be practiced with good success in guarding against insects of almost all sorts, the weevil excepted.

THE HARVESTING

is a very important part of wheat raising. From the time the wheat begins to turn, the farmer has much anxiety. His fields are closely watched, while he is preparing to perform the hardest work of the season. Every thing must be put in perfect order. Help must be secured, (and, what is also important, preparations be made to pay help). Wheat cut too green will shrink, and if too ripe it will shell. But there is little danger of making the mistake of cutting too green. Most wheat is cut too ripe. The earliest sown fields should be visited from day to day, the kernels examined, and as soon as the wheat is out of the milk, and fairly in the dough, cutting should commence. Wheat cut in this stage is whiter, will weigh more to the bushel, yield less bran, more and better flour, and sell better—as is well known to all who have tried the experi-


inent. Cutting should be done with neatness and dispatch. Never purchase a reaper until you have tried the identical machine you intend to purchase. Reapers of the same manufacturer will not work equally well, therefore try different ones, until you get one that will do the work well and fast. When you have a reaper keep it in repair, and if you are not capable of doing it yourself, put it in charge of a man that is. A poor cradle, or a good one in poor repair is the greatest nuisance a farmer can have in his fields, except a poor hand. A cradler should understand keeping his cradle in good working order, for a cradle or rather its fingers want altering in changing from light to heavy grain, or from wet to dry grain. Then again the scythe may be too long so as to cut more grain than the fingers will gather; in this case cut off the point of the scythe, and if the fingers are too long serve them in the same way, otherwise they will haul in the standing grain and make hard work, and at the same time a waste. And this is not all—the grain thus pulled down will lie under the next swath and hinder the binder.

BINDING.

Poor binding spoils every thing from cutting to feeding the bundles into the thrashing machine. In binding after a cradler, while raking the swath into a sheaf, the butts should be kept against the leg and the grain slid together, instead of rolling it, so as to keep the butts even and the sheaf of its proper length. A band should be made in such a way that one part will draw across the heads in the band and hold them firm against the sheaf. Too much straw in a band is a detriment, as it can not be drawn tightly enough;—no more than fifty straws should be used. To make a stout band quickly, gripe the straw in the left hand just below the heads; divide it with the right hand; pass one half around the other and over the thumb; take it in the right, near enough to the middle to clap the thumb on the heads, and thus hold them firm. Place the band over the bundle, and at the same time pass the left hand under it with the back next the ground, grasping the lower end of the band half way from the heads to the tie, and draw it under the sheaf, as near the middle as possible. As the tie in the band becomes firmly set against the sheaf, slip the hands together, holding on with the three lower fingers of the left hand, draw the end in the right hand between the thumb and forefingers of left; then tuck the ends under with the thumb of the left hand; throw it a little back, then clap your rake on the but of the sheaf, draw it towards you, dropping the rake off the bundle on the ground so as to catch the scatterings and pass on to the next. What I have been so long in describing can all be done in half a minute. Binding done in this way will stand the test of handling, and every farmer knows it must undergo a good deal before it reaches the thrashing machine. Just consider, Mr. Binder, how much you may hinder the operations of the harvest by slovenly binding. The sheaves must be carried together, perhaps by boys, then shocked and capped; next pitched on the wagon or cart, then pitched to the stacker on the mow, thence to the band cutter. Should only one bundle in twenty give out in passing through all these various moves, it wastes much time and grain. One man stopping to bind a bundle hinders not only himself but another man and team. It requires much time to gather up the scatterings, and these put into a stack often causes it to slide out of shape, which lets in the water and sometimes destroys a large quantity of grain. Then again the thrashing is hindered as it takes much longer to thrash loose grain than bound. A thrashing machine running at half speed hinders half the time of ten or twelve hands and eight horses, and all in consequence of a poor slovenly binder. Brother farmer, just watch your binders, and if you can't persuade them to do their work well, pay them off and let them tramp. (Provided you can get better ones.—Ed.)

SHOCKING.

Large fields of wheat are often seen thrown together, two and two, and then, in consequence of the hurry and scarcity of hands, the grain is allowed to remain for weeks, and unless a man is employed to go over the ground after every blow or rain, it must damage to a considerable extent, for the heads can not remain long lying on the ground without growing. By wetting and drying a number of times it becomes bleached, the bran shrivels, and the grain loses its vitality—called among farmers being "banged."

Grain of all kinds, and more particularly spring wheat, should be put up in round shocks and capped with a double cap. Commence by setting four bundles in a square, and then four more, one in each corner thus:  setting the butts firm on the ground and pressing the heads together. Select two smallest, long, slim bundles, break one across one arm by hand-fuls until the whole is broken. Then lay it on the shock, spreading the heads and but as much as possible. Then take the other bundle and slip the band well towards the but, and proceed as before, placing the heads in the opposite direction from the other, letting the heads cover the

bands of the first one. Wheat shocked in this way will stand a long time, and any storm, except a hard blow, without damaging. It will dry out in a shorter time than if set two and two, for the reason that water can not penetrate any part of the shock. Wheat cut very green will cure in this way as soon as any, as any one can see that all the bands are left to the air. It will not shell as badly when handling, and is not exposed to birds and chipmunks as when set two and two. Should the grain be very ripe and dry, fourteen sheaves may as well be put in a shock as ten.

STACKING, ETC.,

requires care, skill, watchfulness and cautious judgment. The careless and slovenly manner in which stacking is often done is the cause of much loss of grain and time. Stacks thrown hurriedly and loosely together are sure to damage, unless the weather holds dry for ten or twelve days until the stacks are sufficiently settled to shed water. Farmers are often deceived in stackers. Men coming from a distance to work in harvest, and anxious to make as long a job as possible, "crack themselves up" as stackers; they are set to work, and the farmers knowing them to be good hands otherwise, have confidence in them, and take little notice how the work is done, and at thrashing time, lo and behold wet stacks from top to bottom, three or four hundred bushels of wheat to be kept separate and dried; then, after two or three weeks of perplexing care, and loss of time, he has that amount of damaged grain for market, which injures his reputation as a good wheat grower.

In driving to the stack, care should be had not to drive the load too near the stack or hit it, for after a stack is once started a small jog or push may cause a slide, which will create a shoulder and a leak, besides making much trouble for the stacker. Commence your stack by setting a bundle erect in the center of the ground on which you wish to build the stack, then set around it, going round and round keeping the sheaves as perpendicular as possible until you have attained a diameter of about fourteen feet; still continue to enlarge the bottom but press the heads inward setting the butts out until the bottom will measure sixteen feet across, bringing the outside course quite flat. A few rails or boards may advantageously be used under the stack. Now commence on the outside, laying the second course upon your knee, putting your whole weight on each bundle and packing them firmly together. The second row must be placed upon the first, covering the heads of the first and laying the butts even with the bands, if the bundles are of ordinary size and length of straw. Should the straw be long and loose, cover the bands from sight; if short, leave them in full view pressing them firmly with the knees, and continue to go around in this way until the center is reached. Keep constantly in mind that the center must be kept full and solid. To effect this more perfectly, the outside rows may be laid loosely and packed a little as the center is approached, so that when the stack settles the outside courses may settle faster than the center, thus giving the butts of the outside course a downward inclination which will carry off the water perfectly. Build the stack perpendicularly four to six courses; then lay out, very slowly at first, five or six courses more; then three courses, one above the other, after which draw in, gradually at first. As soon as you commence drawing in, fill the middle fuller or pack tighter. A stack may be rounded off on the top, for convenience, and be perfectly safe from wet, by capping with hay or straw. If carried to a peak, a cap can be made of a sheaf and put on butts up. It is very inconvenient to put a sharp top on a large stack, oftentimes requiring a third hand, and the work is not better.

Should your stack become lower on one side than the other, avoid the foolish practice of laying on two courses, for by doing so you often cause a slide, but pack the lower side tighter, and the opposite looser until your stack is level, then proceed as before. The pitcher should have his mind on his work and keep a constant watch of the stacker. Care should be always taken not to throw the bundles on the outside course, after the stacker is off, and before the second course is placed upon it, for the reason that it may get a start outward, throwing the stack out of shape, so that it will settle with a shoulder and make a leak. Always throw the bundle in the most convenient way for the stacker. Never throw the second bundle until the first is disposed of. Mowing away wheat in barns I say nothing of, as it is safe in almost any way, but is done most conveniently in regular courses.

THRASHING.

Probably no work is more dreaded by the farmer than thrashing. Why it is so, I hardly know, unless for the reason that there are so many slovenly, lawless thrashers. The remarks made on running a reaper will apply to the thrashing machine. Farmers that know nothing of machinery often purchase thrashing machines and go forth with all confidence imaginable, but soon, for want of care and the requisite knowledge of their machine, it

becomes rickety and badly worn. Thus dilapidated, stoppages frequently occur, making the job long and tedious. One experienced thrasher that has the faculty of keeping his machine in repair, is worth more to a farming community than six of the opposite stripe. Thrashers with good new machines are the most profitable to employ, provided they understand their business.

The farmer should have hands enough at thrashing to relieve him from any fixed position, so as to make himself a "spare hand." This gives him an opportunity to look around and see that the work is well done. Examine the straw, and see that the wheat is thrashed clean; examine the sieve and see that the wheat does not blow over in the chaff. Look to it and see that the wheat is not "by the cylinder, and if so, order the concave lowered.

Thrashing should never be done until the stacks are through sweating. Stacks after standing one week, commence sweating and continue to sweat about two weeks, so that it is not safe to thrash until the stacks have stood for about four weeks. Wheat thrashed while sweating is sure to be damp and liable to must in the bins; but thrashed after the sweating process is over, it is better for milling than when thrashed before, from the fact that the bran is softer, and the flour is easier separated from it, thus giving a better yield, and whiter flour. Should your wheat be damp, and it be necessary to put it in bins without drying, avoid the foolish practice of putting in lime to absorb the moisture. Throw in a few stones or bricks, which will draw the moisture from the wheat, having the same effect as the lime, and leave the grain clean and smooth; which will please the miller much better than lime and rough dirty wheat. To clean it of smut for seed roll in lime for twenty four hours, which will burst the smut balls; then you can blow them out with a good mill.

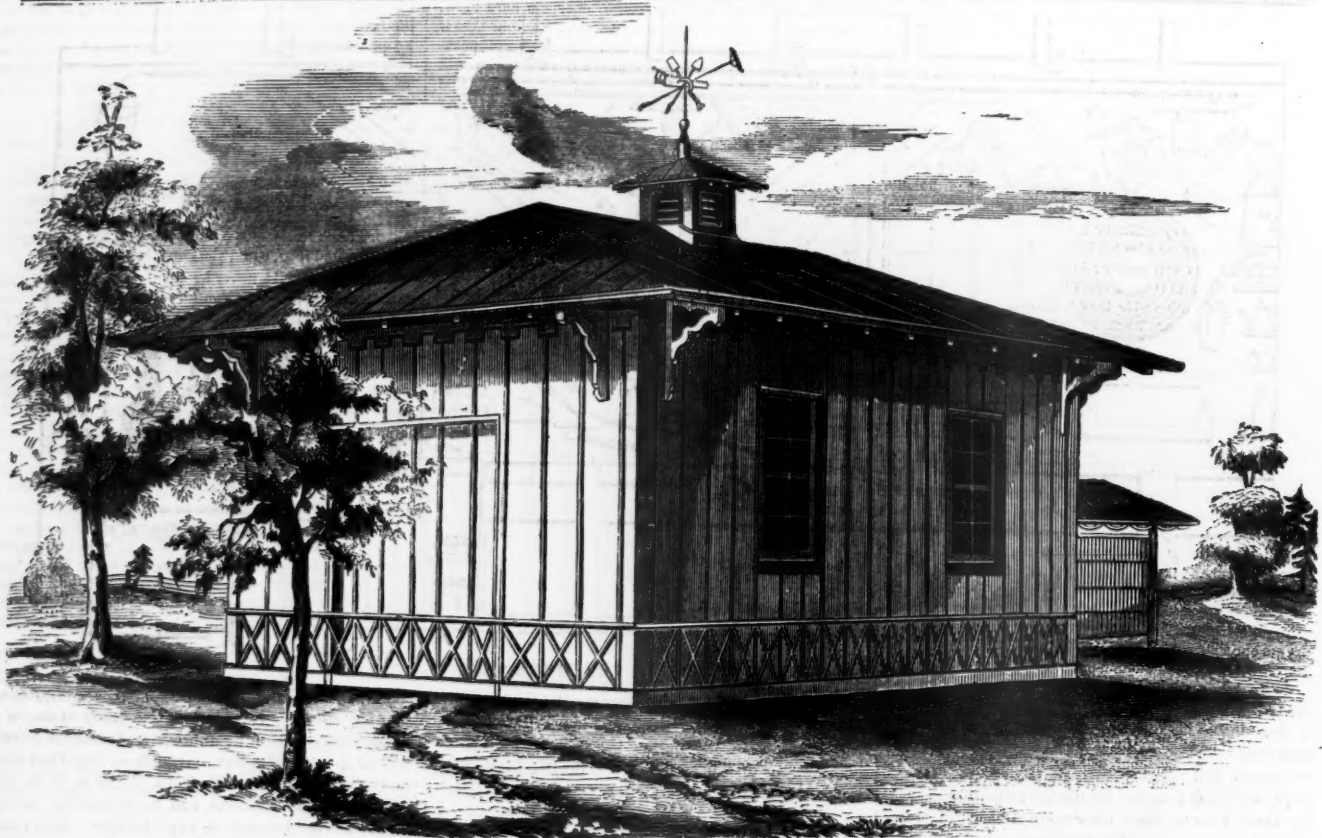
MARKETING.

Marketing wheat successfully depends very much on the locality in which the farmer is situated, and the facilities for getting to market. Obstacles are often thrown in the producers way by the grain speculator, such as raising the bids for a day or two so as to get a large quantity coming into their place of buying, and then bidding down below all reason. In towns where that practice prevails, watch all their moves, and when your suspicions are strong enough to warrant it, call on the scaler of weights and measures. Still, that is of but little use, for as soon as he is gone the scales are out of balance or the measures are exchanged for others to suit the trade. Many ways are resorted to, to pilfer from the honest unsuspecting farmer. Some of these I have detected in my experience, and will mention. Every farmer that goes to market should know his own weight, and be sure his wheat is weighed step on the scales, see that they are balanced and weigh rightly, for scales are so constructed that a slight move will throw them in the buyer's favor—that is one practice. Again a set of false weights is sometimes kept and slipped on slyly. A sixty pound weight is sometimes placed under the large ones. The grain dealer will spill a small quantity and forget to put it back. If measured, fix your eye on some mark on the half bushel so as to know it, and see that it is not changed. As soon as you discover any fraud practiced on you, have no more dealing with that man, for there are plenty of honest men in the grain business. When you find one of that character, give him all your patronage and induce as many of your neighbors as possible to go with you; and at the same time, watch him to keep him honest. He will pay you all he can afford to, and if another man offers you a cent or two more than he does, don't, like a blind fish, grab at the bait, for there is surely a hook at the end of the line.

Farmers that raise wheat enough to do so should send by the car-load, or cargo, to some commission merchant in a large commercial town, say Chicago, Milwaukee, or Buffalo, and consign his wheat to him as long as he is doing a large business, for be assured, that when a large number of his customers have left him, there is something wrong, and the less business he does the less he can afford to be strictly honest. As to the time of marketing wheat, sell when your creditors want their pay, or when you can use the money to the best advantage.

GENERAL REMARKS.

No farmer can succeed any great length of time in wheat growing by following that branch of agriculture alone. Fertilizers must be had sooner or later, and the straw alone and manure of the teams afford but a small supply. Therefore a farm of 200 acres should be so arranged as to keep at least one hundred sheep, five cows, and raise helters enough to keep the stock of cows good. Also raise a yoke of oxen as often as once in six years. Keep a good pair of mares and from them raise, occasionally, a span of colts for market, or to remain on the farm. Six to ten swine may be fattened yearly. From that amount of stock, if the straw is properly worked in, from 200 to 250 loads of manure may be made annually. Wheat will do well and equally well on corn stubble as on plowing, if well cultivated in.



VIEW OF THE TOOL HOUSE OF TOWNSEND SHARPLESS, AT HIS SUMMER RESIDENCE IN BIRMINGHAM TOWNSHIP, CHESTER COUNTY, PENN.

A Tool House—Valuable Suggestions.

A separate place for each thing, and every thing in its place.

All ranged in order, and disposed with grace,
Shape marked of each, and each one in its place;
Nor this alone the curious eye to please,
But to be found, whenever required, with ease.
If used or loaned, and not returned by rule,
The vacant shape will show the missing tool;
Thus often urged the careless will improve,
And rules of order soon will learn to love.

The Tool House, drawings of which are presented to the readers of the *Agriculturist*, is at the summer residence of a citizen of Philadelphia. The building is 20 feet long by 12 feet wide, and is lined with

smooth boards. The engravings are exact representations of the building and its interior arrangements, with a few slight exceptions; and notwithstanding there are about 200 tools or implements upon its walls, yet the number may be considerably increased by filling up the vacant spaces with smaller articles, as there may be occasion. The tools are well secured in their places, and yet may be taken down or put up with ease. They are supported by means of nails, iron hooks of different sizes (such as are used by plumbers), stout iron staples, both flat and round, and lighter ones made of wire with the ends sharpened, and of size proportioned to the weight of the tool. The shape of

each article is marked upon the wall, with a small stiff brush and ink, and the tools being upon the sides of the building, the floor is left free for other purposes. Their methodical arrangement, and the shape of each being distinctly marked, combine advantages as to economy of space and security against loss, which could not perhaps be so well attained by any other mode, and it is believed to be the secret of causing things to keep in their places. The writer, with whom the idea of marking out the shape originated, has had the plan in operation for many years, and always with satisfactory results; and the illustrations are presented in the hope that they may lead others to adopt this plan.

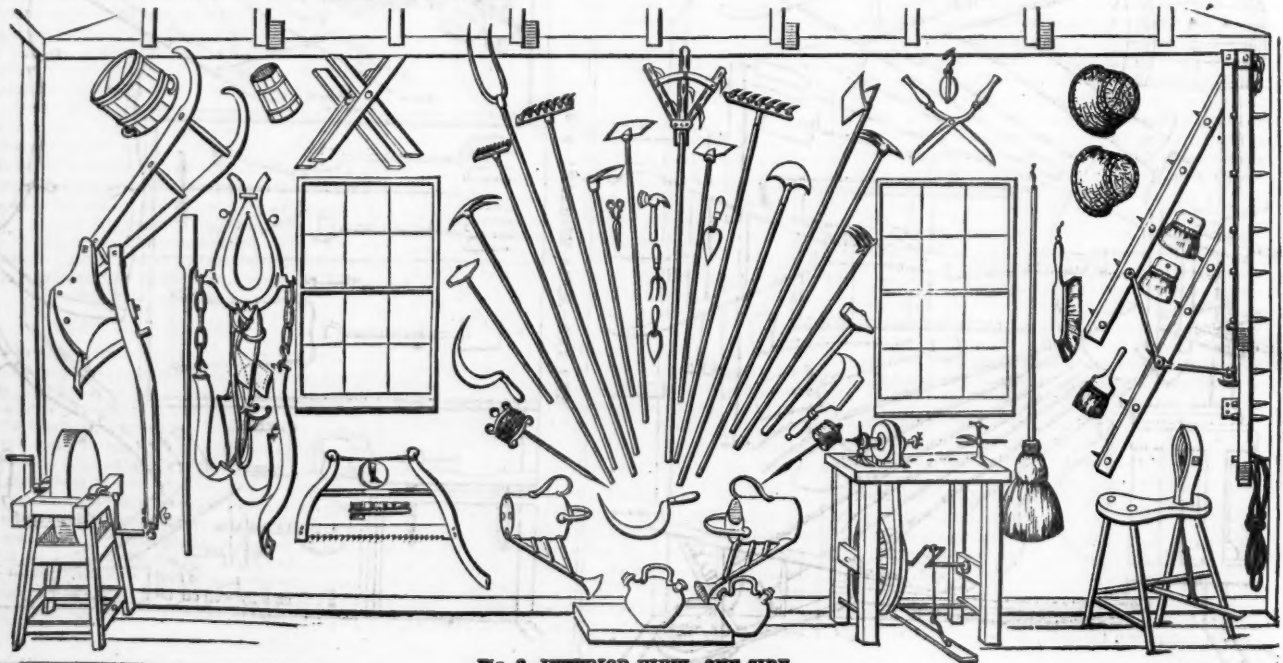


FIG. 2—INTERIOR VIEW—ONE SIDE.

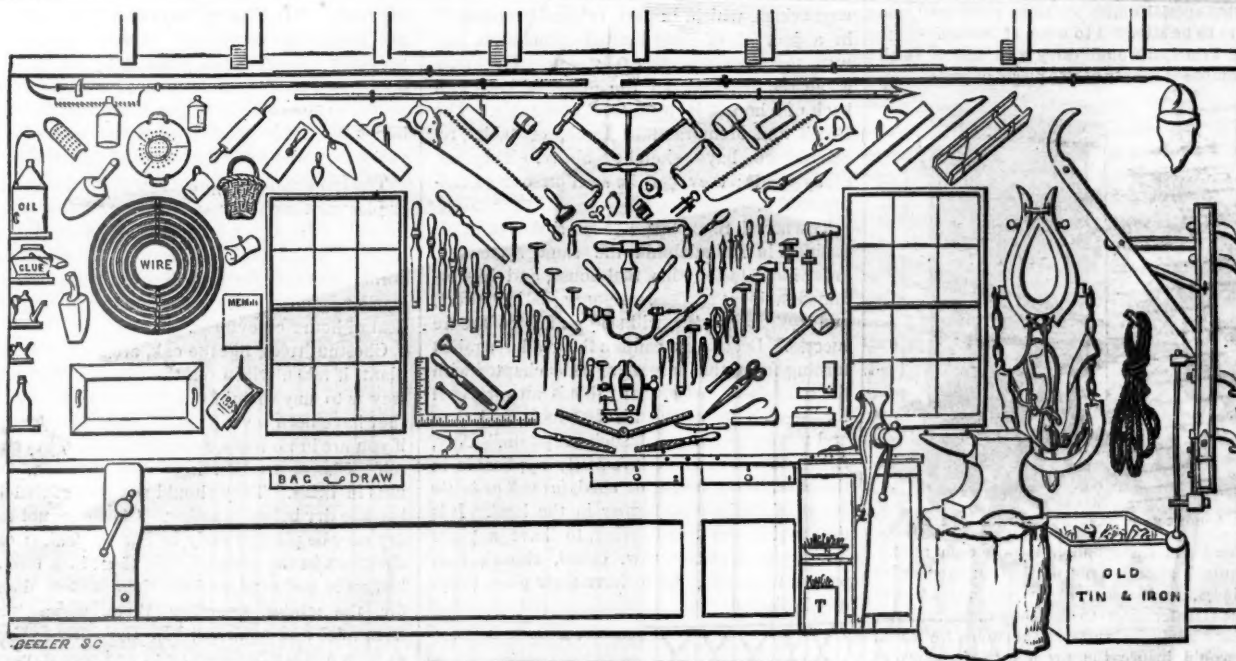


Fig. 3-INTERIOR VIEW-THE OTHER SIDE.

We need not remind the farmer how important it is that every one should have a work shop, or a substitute for one—a place where his tools may be neatly and conveniently arranged, and safely kept, and where those in his employ may occupy their leisure time pleasantly and profitably. Carefulness is often the result of early training, but indolence lies at the foundation of carelessness. Other things being equal, the careful man is generally the prosperous one, while carelessness and thriftlessness being nearly allied, always lead to loss, and frequently to disastrous results. Hence the importance of encouraging in youth habits of order, of carefulness, and of continuous useful industry.—Some borrowers are habitually neglectful in returning. Of these it has been humorously

said, that "it was trouble enough for them to borrow." In arranging the tools as recommended, the value of the principle of association is forcibly illustrated, and perhaps no other mode is so effectual in impressing the necessity of returning borrowed articles.

"Signs which address the ear are lost and die
In one short hour, but that which strikes the eye
Lives long upon the mind. The faithful sight
Engraves the knowledge with a beam of light."

If, therefore, when a tool is loaned, the shape of it is seen distinctly marked in the place from which it is taken, it will make an impression upon the mind of the borrower, which will be increased by a recollection of the fact that it will act as a tell-tale, and will not cease its importunities until its demand for the return of the article is satisfied. It requires a little effort and time to carry the plan into ef-

fect. But what that is valuable can be accomplished without effort? To the energetic mind there is a pleasure in overcoming difficulties, and any one who will adopt the plan, however rude or imperfect may be the arrangement, will find a virtue in it, in the preservation of his tools, and in promoting habits of good order beyond his expectations. Every one is an example to others for good or for evil, and he who makes even one step forward may thereby render important services in his neighborhood.

The writer would venture another suggestion. In every kind of business, there are details often neglected for want of being thought of at the proper time. To remedy this, it is recommended that a slate or pasteboard card, with a pencil and a piece of india-rubber attached, be hung in the shop,

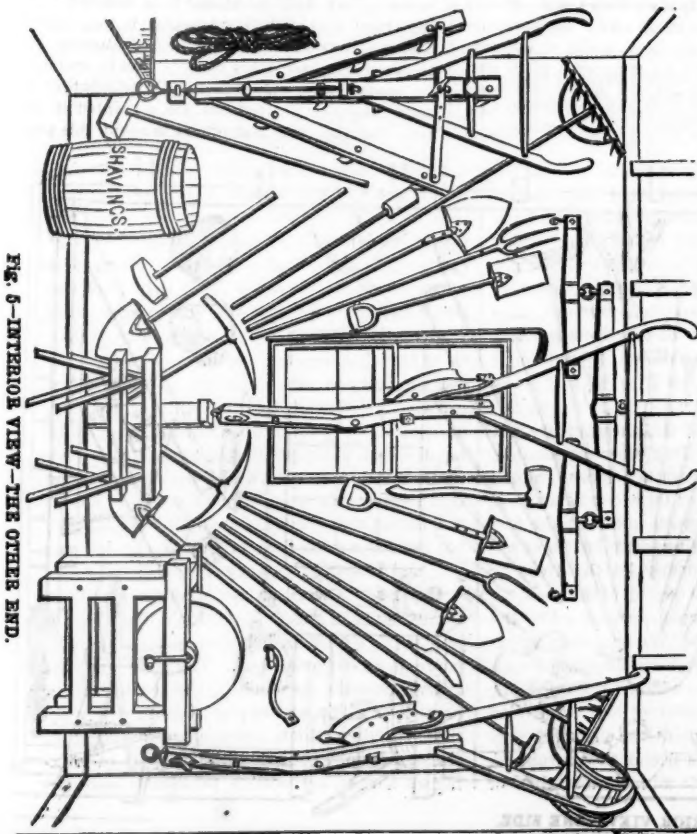


Fig. 5-INTERIOR VIEW-THE OTHER END.

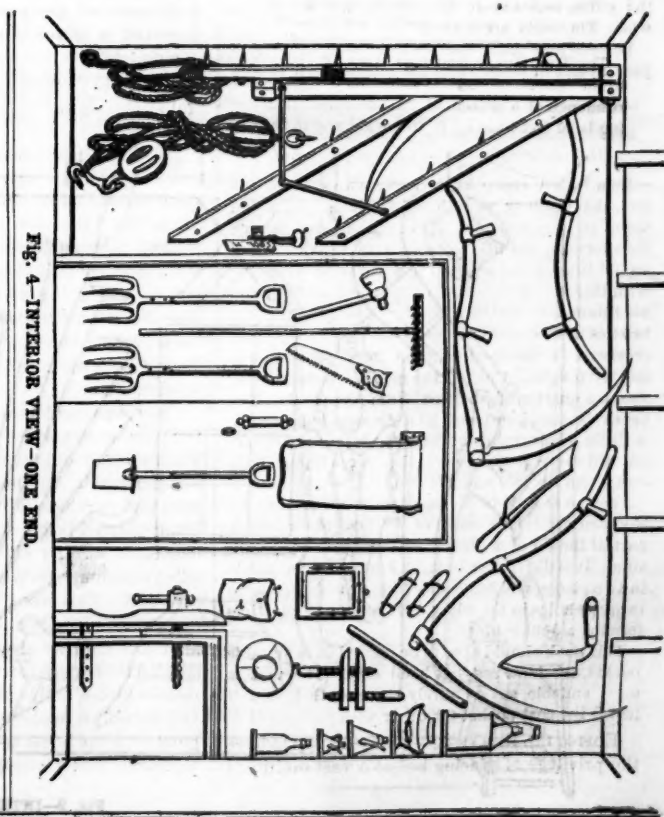


Fig. 4-INTERIOR VIEW-ONE END.

spaced and arranged under proper heads so as to show what special duties are to be performed, and by whom to be attended to when at leisure.

If the Principal would carry with him a small book, composed simply of two pieces of pasteboard,

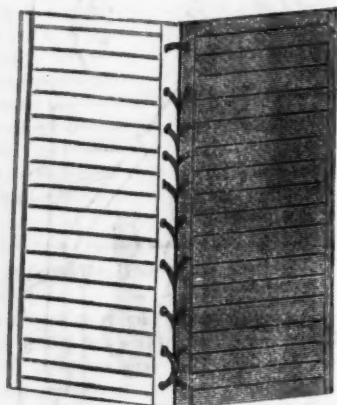


Fig. 6—HOME-MADE MEMORANDUM BOOK— $\frac{1}{4}$ SIZE.

also spaced and ruled, and in it note each matter that required attention out of the common order of business, as it occurred to him, and at convenience transfer them to the shop memorandum, to be there ready for suitable occasions, he would find it would insure the prompt performance of many small duties liable to be forgotten, the accumulation of which is often more burdensome to the mind of a business man, than those of larger moment.

Miquon.

N. B.—Previous to affixing the tools to the wall, the size of the space to be occupied should be marked upon the floor, and the arrangement first made there. Some article should be selected as a starting point or centre, around which the others should be placed so as to produce a symmetrical effect. If not at first satisfactory, change the position of some, or all—arrange and re-arrange them, until they meet approval.

The ink used for making, should be a little thickened with the "grounds," and mixed upon a slate. The lines should be made dark, and on one side [corresponding throughout the whole side] the lines should be made much heavier than the other, to increase the effect, and add to the distinctness of shape, when the tools are absent.

Persons may make their own brushes, thus: Prepare a piece of wood about the size of a pen handle



Fig. 7—HOME-MADE MARKING BRUSH—FULL SIZE.

—then with a sharp knife make two slits in one end, the tenth or twelfth of an inch apart, and about an inch in depth. Then cut out the tongue thus formed, and fill the space with bristles (from an old brush), and secure them there by wrapping with thread. If the edges of the wood near the end are thinned, it makes a neater job. To get the bristles in nicely, cut the ends off straight, lay them crosswise in the opening, then bend them down, and wrap tight. Cut off the outside ends square, about a quarter of an inch from the stick. The brush is then complete, like the sample herewith. A little chalk rubbed over the place to be marked, will cause it to receive the ink without difficulty, and the ink will not run.

I send a sample of the book above referred to, for thy own use. It is made of French paste board, part of the lid of a glove box being peculiarly suitable. It is $6\frac{1}{4}$ inches long by 3 inches wide; made in two pieces, and hinged by tape or ribbon, passed through holes in the edges, herring-bone style, thus forming a double hinge.

This book should always be carried in a suitable pocket, inside the vest, left hand side. The vest is most suitable, as one rarely changes that, and it leaves the coat pocket for other uses. M.

EDITORIAL REMARKS.—We are happy to have the privilege of placing before a vast multitude

of readers the above communication, with the engravings, which, in part, originally appeared in a journal of only limited circulation, and were therefore not generally seen. The hints about the marking out the place of each tool back of where it is hung, are admirable. The Brush and Memorandum Book, or tablet, received, we have sketched above. They are easily made; they can be seen on our exhibition tables.

Townsend Sharpless has carried out in his business in Philadelphia the same systematic order indicated by his tool-house, and has attained eminent success. Energy, patient effort, and systematic habits, will seldom fail to secure success. Let us here caution the reader against turning from the perusal of this chapter with the remark, or feeling, that "this is all very well for the rich man, with his 200 tools, and time and money to carry out such a system." Nay, friend, the same plan is equally applicable in the barn, or out-house, or shed, (as well as in the house,) of the poorest farmer in the land. It is time-saving and room-saving, to have a place for the ax, hammer, saw, chisel, shovel, hoe, scythe, rake, etc., and to have their place properly indicated.

The Chestnut Tree.

For ornamental purposes, the Chestnut (*Castanea vesca*), is hardly inferior to that monarch of the forest, the oak. Its branches ramify more loosely, and spread over a greater surface in proportion to its height than most of the oaks. It also grows more rapidly, and in the forest it often rises ninety feet. It attains to great age, and then is of immense size. Its dark, finely cut and glossy foliage, its lofty and massy head, covered at certain seasons with golden flowered tassels, and then with clusters of fruit, render it a grand and picturesque object in the landscape. With several of the old Italian artists, it was made a favorite feature in their paintings. "This is the tree (says Gilpin,) which graces the landscapes of Salvatore Rosa. The chestnut flourished in the mountains of Calabria, where he painted. There he studied it in all its forms, breaking and disposing of it in a thousand beautiful shapes, as the exigencies of his composition required."

The European varieties resemble our native tree, but have this advantage, that they remain green several weeks in Autumn, after ours have fallen into "the sere and yellow leaf." The Spanish chestnut, a very beautiful tree, is not hardy north of latitude 42° . The common American is hardy everywhere, being found, says Emerson, "on the banks of the Mousam river, Maine, above the 43d parallel of latitude, and thence southward as far as Florida, and in the western States.

The economical uses of the chestnut are not few nor unimportant. Its timber is valuable. The timber of old trees is rather loose grained and perishable, but that of the second growth is hard and durable. For posts and rails, the first being charred before setting, it makes an excellent material. By all means let the trees be felled in summer, (in what quarter of the moon we care not). This wood is sometimes used by the carpenter for inside finish. We have seen several private libraries in which chestnut wood constituted the material of the window-frames, doors, mantel pieces, and book-shelves, and being oiled and varnished, without paint, the effect was very good. In the house of a friend, thus furnished, we hardly know which to admire most, this, or

the oak of his hall, or the butternut of his dining room. "In France," says Michaux, "chestnut copses are considered valuable species of property. Every seven years, they are cut for hoops, and the largest branches serve for vine-props; at the end of fourteen years, they furnish hoops for large tubs, and at the end of 25 years, they are proper for posts and light timber."

The boys and the squirrels will put in another plea for the chestnuts—they are capital things to eat! "Going a nutting," means a great deal of fun. And a peck of chestnuts bought at the corner grocery for munching, with lads and lasses around the winter fireside, means a great deal of home enjoyment.

Chestnut trees, like the oak, are hard to transplant, if taken wild from the woods. The best way is to buy them from the nurseries, where they have been several times transplanted. Or, if you are in no haste, raise them from seed yourself. Choose a rather light soil, and sow the nuts in drills. They should not be allowed to become dry before planting. Chestnuts not too dry may be planted early in Spring. Take fresh chestnuts in the autumn, mix them in a box of leaf mold and sand, and set them out of doors for the winter, guarding them, meanwhile, from mice and squirrels. In the early Spring, as soon as they begin to swell and sprout, plant them out in drills two inches deep, and a foot apart in the drills. The second year, take out every other tree, to give the remainder a better chance to grow into handsome, shapely specimens. By the second or third year, they should all be transplanted, so as to fit them for their final removal.

Garden for an Old Gentleman.

MR. EDITOR:—I lament to see so many gardens now-a-days made in such a starched up manner. Especially do I regret to see the "front-yard" spaded up and laid off into flower beds of all sorts of shapes, triangles, rhomboids and so on. Full half of these beds are very slovenly kept, and their untidiness makes a neat man nervous. But if kept ever so well, the gay colors of the flowers right before one's door, are rather exciting to an old man who loves quiet. What need of keeping folks in a state of admiring ecstasy all the time? Why not give us in front of the house and along the main walks, simply green grass, smooth as you please, and trees as fine as you please; and then place the flower borders a little one side, where we can easily visit them, and enjoy their colors and perfumes when we have a mind to? Such are the conclusions of my long experience: the readers of the *American Agriculturist* may take them for what they are worth.

I am sorry to see so many old gentlemen growing indifferent to ornamental gardening, and caring only for beets and cabbages. With me, the love of my youth and prime keeps fresh under my thin grey locks. Sometimes, I fancy that I detect fragrance less nicely than I used to, and distinguish shades of color less accurately; but there is a good deal of enjoyment left me yet; and I mean to keep my senses bright by use.

May I add a word or two of advice about the arrangement of gardens? I don't like to see a jumble of geraniums, heliotropes, verbenas, and petunias, in one small bed. The sight gives an orderly man the headache. Put each sort of plant by itself in masses; or at least, put only those together which resemble each other in size and form. Probably, the old plan of mixing up shrubs, herbaceous perennials and an-

nuals in the same bed of the flower garden will never die out—perhaps it had better not, all things considered—but would it not be well to take more pains to keep up a constant succession of blossoms in such borders? As fast as the spring bulbs bloom and fade, let early annuals be set out to fill up the gaps; and so when the biennials have had their day and gone. Keep the whole ground covered with fresh looking plants of some kind. In setting out herbaceous plants, don't stand them in straight rows, and exactly the same distance apart, like a regiment of spruce soldiers; break up the stiffness somehow.

There are two or three other things you must bear with from an old man, viz.: one word about walks, one about seats, and one about grass. You can't make your walks, my son, too hard and smooth. Of course, you will keep them clean, the verges well defined, and the curves as neatly cut as when first laid out. Some persons let the grass grow out into the gravel in one place, and then jag into the edges rudely in many other places. Preserve your lines well. Nothing gives a place such an air of finish as a good system of walks well kept. And when I visit you, let me find them hard and smooth, for I am not very sure footed of late years.

But good paths are not the only thing; they should lead to something. If they are long, there should be several resting places by the way-side, little nooks under the trees, sheltered from the sun and wind, with comfortable seats where one can sit after dinner, and read his book or newspaper, or play with his grandchildren.



Let one or more of these resting-places have good out-looks upon the surrounding country, commanding views of hills, streams, and the sky.

Now, about grass. A hay-field is a good thing in its place, very; but before a gentleman's front-door, it is *not* good. Oh! for the green, velvety lawns I saw in merry England, where I once traveled when a young man. But why not try to have good lawns in this country, be they large or small? We might have them, if young people would only set about it. Get your ground well graded at first, well tilled, well seeded down: then mow the grass often, (say once a fortnight) roll it after every shower, and you have a lawn worth the name. Give a country place good trees and smooth grass, and it will always be attractive. But I plead most earnestly for the smooth grass, for it has such an air of calm repose to an old man's eye, and such a pleasant softness to the tread of an old man's foot.

SENEX.

Fungi in Cellars.

A late number of the Mark Lane Express speaks of a destructive fungus, which is doing great damage in England, especially in the wine cellars. It attacks the corks of the bottles and causes their decay—often to the destruction of their entire contents. Of a lot of Sherry bottled in 1840, the recent loss amounted to ten bottles in a hundred, and in other instances it was still greater—in one case amounting to eighty bottles in a hundred. The fungus, or dry rot, had penetrated the corks, even where covered with black mouse skin. The greatest mischief was found in cellars in which either saw dust or laths were used, the spawn of the fungus being apparently introduced with the wood or saw dust. Where either of these are used, it is recommended to first kyanize them by steeping in a solution of blue vitriol and water. But an effectual remedy would be, to seal the corks, by dipping them into melted lard and resin, of a consistency which would neither drip nor crack off. This will entirely prevent attacks from fungi, and from insects, which sometimes prove troublesome in wine vaults.

A Grape Hint.

In talking, lately, with a German vineyardist, the subject of spring and fall pruning came up. We advocated fall pruning for several reasons, and among others, this, that in autumn, the vines do not bleed, as they would in the spring.

"But," said the German, "dat ish no matter. Let him bleed, I want him bleed. If you cut off de canes in autumn, de wound dries up and hardens over." He went on to say that the drying up of the wound in autumn prevented the escape of the sap which naturally belongs in those canes, and which ought to be allowed to escape. If it can not pass off, it returns to the roots and causes them to rot.

Our friend was very earnest on this point. He insisted that for every cane cut off in autumn, a root was destroyed by excess of sap and consequent rotting. Cut off the shoots in the spring, and let the sap which has accumulated in the winter, flow off through the wounds, and no harm will come to the plant. When the excess has run off, it will stop and the wound will heal. He also maintained that fall-pruning, by checking the natural escape of sap, through several canes, caused a superabundant growth of new wood in the following summer. Prune in the spring, let the surplus sap run off, and you will get but a moderate growth of new wood.

As to fall-pruning causing rot of the roots, and premature death of the vines, we told our friend that we had seen vines so managed for a quarter of a century, and they were still in perfect health, much more so than some other vines of a neighbor which were seldom, if ever, pruned. We would thank him to *prove*, as well as assert, that fall-pruning caused rot in the roots. On the contrary, we would ask, when shoots are cut off late in Spring, does not the out-flow of sap induce a species of blight and rot upon said shoots? It certainly does on fruit and shade trees pruned at that season.

Our German friend's last argument had some more weight with us, viz.: that autumn-pruning induced a superabundant growth of wood the following season. This *fact* can not be denied. We stimulate growth by deep trenching and manuring, and then we excite it again by autumn pruning, which breaks up the balance between root and top. In reply, we hinted some objec-

tion to the deep trenching and heavy manuring recommended by some grape-growers, and we advocated a moderate pruning in mid-summer to check this overgrowth, and so save the need of severe fall pruning. Also, we said that the grand object in grape growing was to get regular and abundant crops of good fruit; and he could not deny that the prevailing system produced such results. We were tempted to hint to him that the mildew which we had often seen in his vineyard, did not speak well for his system; but we let the hint go unspoken. Still, the German's notions (which he said, were the doctrines of his countrymen in Europe,) are worthy of consideration.

How to Grow Gooseberries.

Many cultivators suffer from insects and mildew so badly, they have about given up the attempt to raise this very agreeable fruit. We suspect that a barren soil, stunting the growth of the plants, is, in many cases, the cause of the blight complained of. Another cause is the sudden alternations of temperature that occur almost every Summer. It is a mistaken notion that because the gooseberry is often found wild in poor soils, it therefore needs no manure. With the writer the treatment which ensures the best results is as follows: Give the plants a dressing of manure in the Fall, packing it in around the roots in Spring. Keep the ground clean and open until about the middle of May or first of June. Then, spread under the branches a layer of straw five or six inches thick, letting it extend over the ground as far as the roots penetrate. This mulching should remain on the ground until the first of September, when it should be removed and the soil worked clean. The design of this mid-summer dressing is to prevent any check in the growth of wood or fruit, and to keep the air about the bushes uniformly moist and cool. In this simple way, we manage to get good crops, as often as five years out of seven. Persons near the sea-side might use sea-weed or salt hay for a mulch. Tanners' bark is often used with success.

Overgrown Oleanders.

Such cases are quite common. In many a house we have seen oleanders from six to eight feet high, handsome and thrifty, but taking up too much room, and so large and cumbersome as to be moved with great difficulty. What shall be done? Just this: begin at once to raise a new plant from the old pet of the household. Take off cuttings six or eight inches long after they have done flowering next season, set them out in any shaded border of the garden, working in a little sand where they are to stand. If the wood is well ripened, eight out of every ten will make fine rooted plants in a few months.

Mushroom Spawn.

In answer to several inquirers: The mushroom seed, or "spawn," as it is usually called, is kept in the form of bricks, made of horse manure, cow dung, and loamy mold, in which a little of the spawn has been inserted, and through which it has spread. These bricks are kept on sale by the large seedsmen, at a sixpence or so each. The spawn is often found in old horse manure, in the form of small white threads running through the mass. For full directions see *Agriculturist* of last September.



NEW LARGE FLOWERING GERMAN STOCK, (J. WESLEY JONES' COLLECTION, No. 4.)

(Engraved for the American Agriculturist.)

The above engraving is as fair a representation as can be given (without the beautiful colors) of a well-grown specimen of this plant, recently exhibited at the office of the *American Agriculturist*, by Mr. Jones of Chatham 4 Corners, N. Y. If regularity of form were indispensable in the structure of a flower, to allow it to be called beautiful, then certainly the German stock would not be admitted to that class. But fortunately, some things are beautiful that are not symmetrical. The species here represented, the *Mathiola annua*, produces more varieties than all the other species together. It is a native of the South of Europe, and is usually found growing near the sea shore. The principal varieties now in cultivation have originated in Germany, from which country we obtain our seed. This seed produces flowers ranging from the purest white to the darkest purple. To secure very early flowers, the seed should be sown in March in a hot-bed, or in a box or pot in the house. The soil in which they are sown should be finely pulverized and moderately rich. Cover the seed about one-quarter of an inch deep,

and when the plants have grown an inch or so high, they should be thinned if too thick, and as much air given them as possible, but not enough to check their growth. If thinning and airing is not attended to, they are very likely to damp off, as it is termed by gardeners. As soon as the weather has become warm, they should be transplanted into the open ground, always taking a damp day for the operation if convenient. For later flowers, or general culture, sow the seeds in drills in the open ground, being careful to have the soil finely pulverized, and not to cover the seeds too deeply, or let the soil get baked or dry, as this will prevent the seeds from growing. When the plants have made their third or fourth pair of leaves, if they then stand too thickly, a portion of them should be pulled out, leaving them eight or ten inches apart. The plants thinned out may be transplanted elsewhere, with moderate care. The seeds are quite abundant. We had them in our distribution list formerly, but left them off for those more novel, or less generally to be obtained. If desired, they can come in again next year.

Chinese Wistaria—Beautiful.

One of the best perennial ornamental vines, is the Chinese Wistaria, (*Wistaria Sinensis*). It is found native in China and Japan, and when first brought to this country, was named *Wistaria*, in honor of Dr. Wistar, a well-known botanist of Philadelphia.—It is a very rapid grower, often making shoots from six to ten feet in a single summer. It blooms profusely; and, singularly, the flowers appear in the Spring before the foliage is fully developed. These flowers are quite fragrant, and appear in large, hanging masses like clusters of grapes, or more exactly, like locust blossoms six or eight inches long. Each flower in the cluster is shaped like the pea-blossom, and is of a pearly-lilac color. Last May, we noticed a vine covering a space ten by twenty-five feet, on which we counted four hundred and sixty clusters of flowers! While the plant is young, and making very rank growth, the wood is apt to die back somewhat in the Winter; therefore it should be laid down in the Fall, and covered with a little litter. When it gets well established, it is hardy enough for anybody.—There is scarcely a situation for which it is not appropriate. For town houses it answers well to cover blank walls. We have often seen it in this city, clambering up the sides of buildings, fifty or sixty feet high, twining around lightning rods and conductors, creeping along the cornice, and nodding its blooms around the garret windows. It is also a good vine for covering bowers and arbors, or the pillars of a piazza, for clothing a high fence or the trunks of trees. It is sometimes used for training to the posts and rafters of green-houses, in which places it blossoms several times a year. It may be trained into a bushy pole plant, by frequent pruning; and

when so trimmed, it flowers oftener than when allowed to run. There are two other varieties, the *rosea*, and the *alba*; yes, and a third, the *violacea*, with denser racemes, variegated flowers, and with a shade of yellow, violet, and rosy purple. The last blooms later than any other species.—Plants, to begin with, can now be cheaply obtained of most nurserymen (25 to 35 cents each.) Nothing is easier than the propagation of this vine. Bend down a shoot in June, bury it three or four inches, at several buds, wounding the bark a little, and roots will soon form. But bear it in mind, not to propagate from an old shoot covered with flower-spurs: such a plant will never do well. Take a fresh, young cane, and success will be quite certain.—As an illustration of the high value put upon the Wistaria by our English friends, take the following from the *London Cottage Gardener*: "We would select the Wistaria in preference to a pillar-rose, and would prepare a border for it, as we would for a grape vine, in every particular. . . . Our pillar Wistaria should be pruned exactly like a pear pyramid."

Cheap Home-made Glass Cases for Growing Plants.

"Elsie" inquires for "the cheapest possible case for growing a fern or two." The writer has somewhere seen a plan like this proposed: Take four of the largest panes of window glass you can find, bind each of them at the edges with wide linen tape, drawing the tape over the edges of the pane firmly, and sewing it down. When all have been bound, sew the ends together, four square. This will give you a glass box having neither top nor bottom. Now set out the ferns or other plants in a neat wooden box, an inch larger all around than the glass case. Set your case over this, and for a cover, lay on a pane of glass, open at the edges a trifle, to admit air.

Here is another hint: Get at the crockery-store one or more bell-glasses or shades, such as are often used for covering bouquets of artificial flowers. Then provide a flower-pot of some handsome pattern, the diameter of which is about a quarter of an inch larger than that of the glass. Now, fill the pot with sandy loam and a little leaf-mold, and set out in it one of the lycopods or lichens which are often found in green-houses. Cover the same with the glass shade, and forget not to water it occasionally. The plants will soon grow, and ere long fill the bell-glass with their fine and beautiful foliage. This is very pretty as an ornament for a lady's sewing-table in Winter. A student's window, near where we now write, is graced with one of them.

Plants Protected from Frost by Water.

Dingler's Journal (German) states, as a new discovery, that a few pails of water set among in-door plants, which are liable to injury from freezing, will protect them perfectly in quite severe weather.—This is no new discovery, but has long been practiced. Water, when passing from the liquid to the solid or frozen state, gives out a large amount of heat that was previously latent. A considerable body of water would thus keep a room sufficiently warm to prevent the destruction of many plants only half hardy. But with only a small quantity of water, or when the cold is intense, the juices or water in the fibers of the plants will congeal, and by its expansion destroy the organization, and induce disease and decay.

The Dove Flower—(*Peristeria alata*.)

Within the past few years, this beautiful plant has been admired by thousands of our countrymen while passing across the Isthmus of Panama, on their way to or from the gold fields of California. Its chief beauty consists in the form of the central portion of the flower, which resembles a white dove, with out-stretched wings, just settling into its nest of white satin. The little beak of this imaginary dove is tipped with carmine, and its wings are slightly speckled with purple. The flowers are produced on a stem two to three feet high, and continue in bloom a long time, emitting a delightful fragrance. No one, after seeing this curious plant in bloom, will wonder at the early Spanish settlers naming it *Espiritu Sancta*, or Holy Spirit. These fanciful and superstitious people were ready to seize upon every object, that would in any way contribute to strengthen a belief that God manifested himself to them more than to any other people. The natives of Panama, seeing the Spanish worshipping this humble plant, soon be-

gan to look upon it with veneration, and now believe there is sanctity in its very fragrance. It belongs to the family of the orchids, many of which are air plants, and is found growing in low, marshy ground, upon old decayed wood and bark mixed with earth.—A friend of ours sent us, a few years since, a dozen of the bulbs, with a box of soil in which they were found



growing. This soil was composed of decayed vegetation, mixed with a large proportion of soft stone, resembling half burned brick. The bulbs were potted in this soil, covering the lower end about one inch. They received very little water until they showed their flower stems, which was in two or three weeks, and were then watered quite freely, until they were done blooming, and the bulbs were mature, at which time water was withheld, and the bulbs were allowed their period of rest. To grow this plant successfully, requires a temperature of 85° to 95°, and a humid atmosphere.—Soft bricks, broken up into small pieces, mixed with moss and a little sandy peat, is a good soil for them. Put two or three bulbs into an eight inch pot, and keep them shaded from the direct rays of the sun. They are sold by most of the leading dealers in plants. Many keep them growing in pots of earth, on sale, at \$2 to \$3 each.

Newspapers Good for Bed Blankets.

The present cold weather, the high price of cotton used for quilts and "comforters," and the recent increased cost of wool adapted for blankets, all suggest to us to remind the readers of the *American Agriculturist* that common newspapers make a very good addition to the bed covering. Several papers can be pasted at the edges to form a large single sheet, to spread on the outside of a bed or even under the outside cover. The paper itself is a good non-conductor, and aids to retain much of the heat that would otherwise escape. A much more effective covering is made by placing two of the large pasted sheets together, and fastening them at the edges, and at a few other points. The thin space of air between the sheets is an admirable non-conductor. A cover of this kind is quite as effective as a closely woven woolen blanket. We have heard of an over-coat lined with paper stitched to the inside. Those who have not tried it will be surprised at the effectiveness of these bed coverings, which can be prepared in a few minutes from newspapers that would otherwise go to waste. (Of course no one would think of spoiling the *Agriculturist* by using it thus.)

For the American Agriculturist.

Hints on Dressing and Roasting a Turkey.

A turkey is one of the daintiest dishes, and in some parts of the West a commoner one than roast beef. Much, however, depends upon the manner of cooking. I well remember "fixing" my first turkey. I had had servants to do such things, until I was a woman grown, and (like other foolish girls) I never troubled myself to learn "how to stuff a turkey," until I had to do it from necessity.... When Jonathan brought home that first turkey, I was perfectly helpless, and was actually obliged to send for a neighbor to show me what to do with it. She was an old English cook, whose superior I never knew—at least so far as dressing a turkey is concerned. "It must hang up by the heels," she said, "for half an hour after the head is chopped off, for all the blood to drip out. Then lay it in a large dish pan, and saturate one half of it with water nearly boiling, and while stripping the feathers off the warm parts, have the other side down in the water heating. It should be singed before the entrails are taken out—and the flame of paper is preferable to that of straw for singeing.

The stuffing—The liver, heart, gizzard, and neck, together with the sheet fat, are then washed, put down in a pot, and boiled for an hour or more, after which the meat is transferred to a chopping board, and made as fine as mince meat. The soup obtained from these parts, having been poured on the bread destined for stuffing, (stale bread is best, as it will crumble down easily), a little ground sage, pepper, and salt, with a couple of beaten eggs, are added to the mixed meat and bread, and the stuffing is ready. If the turkey has no extra fat to spare for stuffing, a piece of beef suet, about the size of a small teacup, is an excellent substitute, chopping it very fine, however.

After stuffing the turkey, sew up the apertures with a coarse needle and thread, and if the fowl is not young, parboil it before roasting. Some slices of fat beef or pork, laid under and above the turkey in the frying pan, will save the trouble of basting, and keep the meat juicy. A little water must be added to the pan from time to time, to keep the temperature below the frying point. Onion gravy is generally liked. For one cup of dripping or fat, two cups of boiling water is the allowance, together with a finely chopped onion, and two tablespoonfuls of flour. The flour better not go in until the onion is cooked. It should also be mixed with cold water. Use pepper and salt according to taste in the gravy, and also a little inside and outside of the turkey before stuffing. MRS. M. J. S.

Fair Haven, Ill.

"Clinker" in Stoves.

If only the first quality of coal be used, there will be little trouble from "clinker" fastening upon the sides of the stove. It is composed of various mineral impurities which are melted by the intense heat, and hardened by contact with the cooler lining of the stove. Care is needed in storing the coal in the cellar or other place, that no sand be intermixed, as this will cause clinker. The siliceous sand is partly composed, and the potash of the ashes unite, and form a glassy substance, which adheres very tenaciously to iron or brickwork. If a stove becomes clinkered, place a few oyster shells in the fire close to the clinker. By repeating this process a few days the clinker will be loosened so as to be removed easily without breaking the lining. So says a correspondent,

Churning in Winter.

The frequent inquiries for a sure method of always churning butter as quickly and of producing as good an article in summer, as in winter, we can not well answer, for the substantial reason that we know of no such method. Good mixed feed for the cows, keeping the milk and cream from freezing, and bringing the cream to a proper temperature before beginning to churn, comprehend about all we can say on the subject. A "Subscriber," a lady, at Locust Valley, Queens Co., N. Y., communicates to the *American Agriculturist* her method of making butter in winter, which she thinks far surpasses any other plan she is acquainted with. She writes that "by this method the full quantity of butter is obtained, the quality is equal to that of grass butter, the buttermilk is rich and remains sweet for drinking, or for culinary purposes, such as making rice puddings, and the process is certain and simple, and attended with little trouble. It is as follows: The cream is skimmed each day, and placed at once in a kettle, and the kettle put into hot water (to prevent scorching), and put over the fire. The cream is allowed to scald, without boiling. It is then put into a vessel, and set aside; each day's cream being in like manner scalded, and added to the mass, until enough for a churning is obtained. The churning is commenced immediately after adding the last day's cream, which brings the whole to a proper temperature, without thinning by the addition of hot water."

More of the Corn Bread Exhibition— Fifty-four Recipes.

In January we gave a general report of the late Exhibition of Corn Bread, at the Office of the *American Agriculturist*, with the list of the exhibitors, and the directions for making the specimens of bread and cake, to which the premiums were awarded. It will be remembered that the Judges were limited by the conditions of economy, and adaptation to general use for every day diet. There were many specimens, both of corn bread and corn cake, which were superior in point of beauty and taste to those receiving the prizes, but which were not ranked first—either on account of being less economical, or less easily made, or because the specimens exhibited chanced to be not so good as would be implied by the directions, from some chance failure in the baking. But there were at least one hundred specimens which would honor any table, and would please the taste of ninety-nine persons out of every hundred. We present below the directions accompanying a considerable number of specimens, which were specially commended by the Judges. From them it will not be difficult for every family to select several kinds that will be found well adapted both to circumstances and taste. We may add here, that a number of the best loaves of bread and cake rapidly disappeared, so great was the desire of the multitude of visitors to "taste just the smallest bit." This we could have endured, though it deprived us of even a taste of them, but we found, after a time, that not only had the visitors eaten up many good loaves of bread and cake, but they had also carried off the accompanying recipes, as these were left with the several specimens. This was probably done thoughtlessly in some cases, and ignorantly in others, but it deprived others of the benefit of having the recipes published. We would respectfully solicit from the contributors another copy of the recipes accompanying the specimens, numbered in our report last month as follows: Nos. 8—11—21—39—40—44—47—60—75—121—151—158—162—167—170—171. While we give the Committee of Judges credit for having faithfully and laboriously performed their

duty, we fear that owing to the great number of specimens to be examined, some may not have received their due award of merit. Owing to our constant occupation with the visitors, and with the general oversight, we could not accompany the committee in their rounds. We append to the recipes below, in abbreviated form, extracts from the note book of the Judges. [We give now all that room can be spared for. Others will be given hereafter, with some very good recipes recently received from those who did not exhibit.]

No. 1. Brown Bread.—By Mrs. D. R. Pope, Susquehanna Co., Pa. Two quarts corn meal, and 1 of rye, mixed well together, the rye to be unbolted but sifted through a common sieve; add $\frac{1}{2}$ pint yeast, a teaspoonful molasses and a little salt; pour in warm water until thoroughly wet; then dip the mixture into the baking pan; wet the hand and smooth over the top; set it in a warm place to rise; bake 2 hours. (Com. Notes: "Good.")

No. 3. Corn Meal Bread.—By Mrs. Louis C. d'Homergue, Middlesex Co., N. J. Recipe with cost. $1\frac{1}{2}$ lbs. corn meal at 2 cts. per lb., (3 cts.); $\frac{1}{2}$ lb. wheat flour at 3 cts. per lb. ($\frac{1}{2}$ ct.); 4 eggs at $1\frac{1}{4}$ cts. each, (5 cts.); 1 tablespoonful butter, ($\frac{1}{2}$ ct.); 2 tablespoonfuls saleratus ($\frac{1}{2}$ ct.); 1 quart sour milk; total 9 $\frac{1}{2}$ cts. (Com. Notes: "Light, fine in appearance, too much alkali.—Nos. 2. and 4 by the same contributor were good and very economical.")

No. 10. Yankee Bread.—By Mrs. H. W. Ransom, Warren Co., N. Y. Two and a half pints corn meal, $\frac{1}{2}$ pint flour, $\frac{1}{2}$ teaspoonful hop yeast, 1 tablespoonful salt, 3 pints water, set 1 hour to rise; bake 2 hours. Rye flour is preferable to wheat for mixing with corn meal. (Com. Notes: "Good quality, but rather hard baked, and hardly light enough.")

No. 15. Rhode Island Brown Bread.—By Mrs. John R. Fales, Rhode Island. One quart coarse Indian meal, 1 pint rye flour, $\frac{1}{2}$ cupful molasses, 1 teaspoonful each of saleratus and salt; mix with hot water, thin enough to pour. Bake 3 hours. (Com. Notes: "Light, well baked, sweet and good.")

No. 18. Corn Bread.—By Mrs. H. Sinclair, Monmouth Co., N. J. Scald 1 quart corn meal with sufficient boiling water to make a stiff dough; add 1 teaspoonful yeast, 1 teaspoonful salt; set in a warm place to rise; when light, add 2 well beaten eggs and $\frac{1}{2}$ teaspoonful soda; put it in well buttered tins, and bake 1 hour. Good 3 days old. (Com. Notes: "Nice looking; economical, pretty good.")

No. 19. Corn Meal Buns.—By Mrs. H. Sinclair, Monmouth Co., N. J. One pint sweet milk, lump of butter size of a walnut, 1 teaspoonful sugar, 1 egg, 1 teaspoonful soda, 1 teaspoonful yeast, a little salt, spice to taste; when light, mold into cakes, with sufficient wheat flour to prevent the dough sticking to the hands. Bake 1 hour. (Com. Notes: "A fair article, good when hot, for breakfast or tea.")

No. 20. Corn Meal Bread.—By Mrs. H. Sinclair, Monmouth Co., N. J. To $1\frac{1}{2}$ lbs. corn meal, scalded with sufficient boiling water to make a stiff dough, add 1 teaspoonful yeast and a little salt. Put it into a quick oven when light, and bake $1\frac{1}{2}$ hours. (Com. Notes: "Not of best quality, but good for an article so economical.")

No. 22. Rye and Indian Loaf.—By Mrs. C. B. Mince, New-London Co., Conn. $2\frac{1}{2}$ lbs. corn meal, 9 ounces rye meal, $\frac{1}{2}$ teaspoonful yeast, 1 tablespoonful molasses, 1 quart skim milk, 1 quart water. Bake $3\frac{1}{2}$ hours in stove. (Com. Notes: "Light, well baked, very good.")

No. 25. Corn Bread.—By Mrs. Lott Cornelius, Queens Co., N. Y. Into 3 quarts of skim milk, scalding hot, stir 2 quarts of new corn meal; add 1 large teaspoonful of salt, 1 of ginger, and 1 gill of molasses; grease a pan with good sweet lard, put the mixture in; make it smooth and level, pour milk over the top to prevent a hard crust, and bake 4 hours in a moderately heated oven. This like all other preparations of corn meal is decidedly better eaten hot. If to be eaten hot I would add another pint of corn meal. (Com. Notes: "Very cheap, and decidedly good.")

No. 32. Indian Doughnuts.—By Mrs. E. Blake, Middlesex Co., Conn. Stir 2 teaspoonfuls of Indian meal in $1\frac{1}{2}$ cups of boiling milk. When sufficiently cooked add 2 cups wheat flour, 1 cup butter, $1\frac{1}{2}$ cups sugar, 2 eggs, 1 grated nutmeg, and a little salt and yeast. Should the dough be too soft, thicken with equal quantities of meal and flour. When perfectly light, roll to $\frac{1}{2}$ inch, and boil in lard. (Com. Notes: "Fine appearing, good, not cooked enough for corn meal.")

No. 33. Corn Bread.—By Mrs. A. O. Wilcox, New-Haven Co., Conn. To 1 pint corn meal, add 1 pint boiling water, $\frac{1}{2}$ pint hop yeast, a little salt; then work in 1 pint of dry meal and wheat flour enough to mold it up, and when light add $\frac{1}{2}$ teaspoonful of soda, and 1 teaspoonful cream of tartar. Bake 2 hours. (Com. Notes: "Good, though it appears to have been baked a little before sufficiently risen. Economical.")

No. 36. Brown Bread.—By Hannah G. Snow, Camden Co., N. J. Three pints rye meal, $1\frac{1}{2}$ pints corn meal, $\frac{1}{2}$ teaspoonful molasses, 1 cup yeast, 1 teaspoonful each of salt and soda; mix thoroughly with warm, but not scalding water, into a rather soft dough; set it to rise over night, bake in a slow oven $2\frac{1}{2}$ hours, in iron, earthen, or tin pans—iron is best. (Com. Notes: "Evenly baked, light, good.")

No. 42. Corn Bread.—By S. B. Pettit, Gates Avenue, Brooklyn, N. Y. One quart milk, 6 eggs, salt, sugar to taste, 7 parts corn meal, 1 part flour, 2 ounces Durkee's Baking powder, mix dry, then mix all together. Make a stiff batter, and bake in pans 30 minutes. If no baking powder is used, use sour milk instead of sweet, and saleratus or soda. (Com. Notes: "Very superior. Thinish loaf, as it should be, to be easily baked. This sample remarkably well baked.")

No. 45. Corn Cake.—By Mrs. S. J. Pine, Hauppauge, Suffolk Co., L. I. One and a half pints corn meal, $\frac{1}{2}$ pint wheat flour, 2 teaspoonfuls cream of tartar, 1 teaspoonful soda, 2 eggs, $\frac{1}{2}$ pint molasses, skim milk enough to make a stiff batter, flavor with nutmeg and ginger, and bake at once for about $\frac{1}{2}$ hour. (Com. Notes: "Decidedly good.")

No. 49. Corn Bread.—By Mrs. L. I. Prime, Queens Co., N. Y. Five cups corn meal, 1 cup wheat flour, 4 cups water, 2 tablespoonfuls sugar, 2 of yeast, and 2 tablespoonfuls of salt. (Com. Notes: "Very good.")

No. 50. Corn Bread.—Mrs. S. Haviland, Westchester Co., N. Y. Three teaspoonfuls corn meal scalded with water, $\frac{1}{2}$ cup yeast made of rye flour; stir well together; set away to rise; when light, add $\frac{1}{2}$ cup wheat flour; then set away to rise again. Bake 2 hours. (Com. Notes: "Very good.")

No. 52. Corn Bread.—By Mrs. S. Overton, Suffolk Co., N. Y. One egg, 1 gill sugar, 1 pint buttermilk, and a little soda. Thicken with sufficient corn meal to make a stiff batter. Bake 35 to 40 minutes. (Com. Notes: "Very good indeed.")

No. 55. Corn and Rye Loaf.—By M. A. H. Rowe, Columbia Co., N. Y. In 3 pints boiling water stir 5 pints corn meal, 1 pint rye flour, 1 cup molasses, 1 cup yeast, and 1 teaspoonful salt. Bake 1 hour, better in a brick oven, and it is well to have it remain in the oven over night. (Com. Notes: "A large and very fine loaf; other samples from the same source good.")

No. 59. Pumpkin Loaf.—By Mrs. C. W. Powers, Dutchess Co., N. Y. To 2 quarts Indian meal add 3 pints stewed pumpkin, while scalding hot, and work them together with a strong spoon; when cold, add $\frac{1}{2}$ pint wheat flour, 1 teaspoonful milk, 1 cup hot yeast, $\frac{1}{2}$ cup molasses, 1 teaspoonful of salt, and stir well together. Put the mixture into a deep baking pan (iron preferable). When light, bake at a moderate heat 3 hours. If baked in a brick oven, let it stand over night, for a warm breakfast next morning. (Com. Notes: "Light, well baked, good. Other samples from the same source, excellent.")

No. 61. Corn Bread.—By Mrs. P. Knox, Westchester Co., N. Y. Two quarts corn meal, 1 pint flour, 3 pints buttermilk, 3 teaspoonfuls soda, 3 tablespoonfuls molasses, 2 of salt. Put the flour, meal and salt together; dissolve the soda in a little hot-water; put in the buttermilk and molasses; then mix with the hands, and bake 2 hours. (Com. Notes: "Light, well baked; too much soda and salt. The use of too much alkali is a common fault with the specimens on exhibition.")

No. 62. Corn Bread.—By Sarah J. Fanning, Suffolk Co., N. Y. To 3 cups corn meal, add $\frac{1}{2}$ cups wheat flour, $\frac{1}{2}$ cup yeast made of corn meal, 1 teaspoonful salt, 2 tablespoonfuls molasses. Mix with sweet milk to thick batter; let it stand until light; then bake slowly 2 hours; wrap it in a cloth wet with cold water, and let it sweat until cool. (Com. Notes: "Extra light, well baked, good quality.")

No. 77. Corn Cake.—By Mrs. D. G. Henry, Addison Co., Vt. Half pint Indian meal, $\frac{1}{2}$ teaspoon wheat flour, $1\frac{1}{2}$ cup sugar, 2 eggs, 2 spoonfuls melted butter, $\frac{1}{2}$ cup cream and sour milk, $\frac{1}{2}$ teaspoonful saleratus.

(Com. Notes: "Very good. Other samples from same contributor good also.")

No. 78. Corn Loaf.—By Adeline C. Belknap, (address not given). Two quarts corn meal, with milk enough to scald it, 1 pint wheat flour, 1 tablespoonful salt, 3 tablespoonfuls each of molasses and home-made yeast; mix well together, and let it rise about 2 hours. Bake in a slow heat, and let it stand in the oven over night. (Com. Notes: "Light, well baked, pretty good.")

No. 91. Corn Cake.—By Mrs. D. E. McAuley, Fairfield Co., Conn. One teaspoonful soda, $\frac{1}{2}$ cup butter, 2 cups sugar, 3 cups corn meal, 4 eggs, 1 teaspoonful salt, 1 cup milk, $\frac{1}{2}$ nutmeg. Bake $1\frac{1}{2}$ hours. (Com. Notes: "Very good, well baked, remarkably light; economical.")

No. 95. Johnny Cake.—By Mrs. C. F. Moeller, Fairfield Co., Conn. Five cups corn meal, 1 cup wheat flour, $3\frac{1}{2}$ cups buttermilk, 2 tablespoonfuls molasses, 1 teaspoonful salt, 1 of saleratus, a very little ginger. Bake $2\frac{1}{2}$ hours, with a tin cover to prevent the crust burning. (Com. Notes: "Well baked, light, very good.")

No. 100. Indian Pound Cake.—By Sarah S. K. Mansfield, New-Haven Co., Conn. Take $1\frac{1}{2}$ teacupfuls corn meal, $\frac{1}{2}$ cup wheat flour, 2 cups sugar, 4 eggs; 1 teacupful shortening (half butter and half lard); season with nutmeg and cinnamon. Bake $\frac{1}{2}$ hour. (Com. Notes: "Rather too much shortening, but yet good. Corn meal, being naturally oily, no more shortening should be added than is absolutely necessary.")

No. 101. Corn Loaf.—By Dora B. Robinson, Kings Co., N. Y. Two quarts yellow corn meal, 2 tablespoonfuls melted butter, 2 teaspoonfuls salt, 2 quarts milk, or water, or an equal quantity of both, $2\frac{1}{2}$ teaspoonfuls soda; mix all together and bake in a moderately quick oven $1\frac{1}{2}$ hours. (Com. Notes: "Pretty good, but a little injured by too much soda.")

No. 103. Corn Cake.—By Mrs. R. W. Mathewson, Middlesex Co., Conn. Five cups corn meal, 1 cup wheat flour, 3 cups milk, 1 cup cream, 1 egg, a little salt, 1 teaspoonful saleratus, and 2 of cream of tartar; bake in shallow pans 1 hour. (Com. Notes: "Good, apparently too much cream of tartar.")

No. 105. Corn Bread.—By Mrs. J. H. Fullerton, Yorkville, N. Y. Two coffee cups sweet milk, 1 egg, $2\frac{1}{2}$ coffee cups corn meal; mix well together, adding 2 teaspoonfuls cream of tartar, 1 of soda, 1 of salt, 2 tablespoonfuls molasses. (Put in the ingredients in the order named.) Bake 1 hour in a quick oven. (Com. Notes: "Well baked, quality good, other samples from same contributor good.")

No. 110. Corn Bread.—By Mrs. Barnes, Kings Co., N. Y. One quart corn meal, 1 quart boiling water, and a little salt. Mix and bake in shallow pans from 1 to 2 hours. (Com. Notes: "Cheap and good. Other samples from the same source worthy of like praise.")

No. 119. Rye and Indian Bread.—By J. G. Dennis, Newport Co., R. I. Two parts sifted corn meal, 1 part rye flour, 1 teaspoonful salt, 1 teaspoonful saleratus, 1 tablespoonful molasses; mix to a stiff dough with 1 part water to 2 parts milk. Bake slowly 5 hours. (Com. Notes: "Very good; recommended.")

No. 123. Corn Cake.—By Mrs. John Allison, Orange Co., N. Y. One pint thick buttermilk, (sour milk of any kind as good), 1 teaspoonful best saleratus, 3 tablespoonfuls molasses (more if preferred), 2 tablespoonfuls wheat flour, 1 pint yellow corn meal, (white will not do). Mix and bake immediately in square tins about an inch deep, with moderate fire, 1 hour or more. (Com. Notes: "Very good.")

No. 126. Brown Bread.—By Mary A. Castle, Herkimer Co., N. Y. Five teacupfuls corn meal, and 1 cup wheat flour wet with warm water, 1 spoon salt, $\frac{1}{2}$ cup syrup, 1 pint bread sponge, to stand till light, and then to be baked with slow heat 3 hours. (Com. Notes: "Light, well baked, excellent.")

No. 127. Corn Meal Bread.—By Emily A. Tanner, Rockland Co., N. Y. Three gills sour milk, $\frac{1}{2}$ ounce saleratus, $\frac{1}{2}$ ounce salt, 2 eggs, 3 ounces wheat flour, 15 ounces corn meal. Beat the whites and yolks of the eggs separately; add the yolks to the salt; dissolve the saleratus and beat with the sour milk until it foams; then pour together and stir well; add the meal and the flour sifted; and lastly add the whites, which should be beaten to a stiff froth, stirring all the time. Pour into a buttered basin and bake $1\frac{1}{2}$ hours. Estimated cost as follows: sour milk .038, saleratus .008, salt .002, eggs .260,

wheat flour .056, corn meal .187—amounting to .557—total cost a fraction over $5\frac{1}{2}$ cents. Weight of bread 1 lb. $10\frac{1}{2}$ ounces. (Com. Notes: "Rather heavy, but sweet and good.")

No. 130. Corn Bread.—By Emma L. Freeman, Harlem, N. Y. One pint corn meal mixed with 2 pints cold water, stirred into 3 quarts of boiling water, to make a thin mush; add 1 tablespoonful salt and boil $\frac{1}{2}$ hour; when cool stir in 4 pints corn meal, 2 tablespoonfuls molasses, and 1 yeast cake. Bake in a moderately hot oven $2\frac{1}{2}$ hours. (Com. Notes: "All Indian meal, and good; 1-5th flour would doubtless have made it better.")

No. 131. Corn Cake.—By Emma L. Freeman, Harlem, N. Y. One quart corn meal, $\frac{1}{2}$ pint wheat flour, $2\frac{1}{2}$ pints warm water, 2 eggs, 1 to 2 teacupfuls molasses, 2 teaspoonfuls cream of tartar, and 1 teaspoonful each of soda and salt. Mix the cream of tartar and soda into the flour and meal; sift it all in a basin, heap it up around the sides, leaving a hole in the middle, beat the eggs very light and pour them into a basin with molasses; beat them together 5 minutes; then pour in the water and salt and stir all together well. Bake in deep pans 2 hours, in a hot stove oven. (Com. Notes: "Of excellent quality, but apparently not baked enough. Bread from the same contributor, good.")

No. 133. Corn Loaf.—By Mrs. R. W. Cooley, Broome Co., N. Y. One pint boiling water, 1 teaspoonful salt, 1 teacupful brown sugar, and a piece of butter the size of a hickory nut; let it stand till cool, which forms the yeast. Then stir in flour to make it thick; set it in a dish of warm water and stir very often until it begins to rise; then put 5 cupfuls corn meal into a pan, and add 2 teaspoonfuls salt, 1 of ginger, 3 of molasses. Pour on boiling water; sufficient to scald the meal, but not to make it thin. Let it get cold, so that it will not scald the yeast, and add 1 teacupful of the yeast and 1 of flour, and 1 teaspoonful saleratus; mix thoroughly, put into pans and bake 1 hour. The above will make two loaves, good when five days old. Would be better with more flour. (Com. Notes: "Very good, light, well baked, sweet.")

No. 147. Corn Bread.—By Mrs. Lucy W. Kimball, New-London Co., Conn. $1\frac{1}{2}$ lbs. corn meal, 6 oz. pork scraps, 1 teaspoonful cooking soda, $\frac{1}{2}$ teacupful molasses, 1 quart sour milk, 1 teaspoonful salt; mix cold and bake. (Com. Notes: "Light, well baked, fair quality.")

No. 151. Corn Bread.—By Mrs. M. C. Walker, Middlesex Co., Mass. Four cupfuls corn meal, 2 cups flour, 4 cups buttermilk, 2 tablespoonfuls molasses, 1 teacupful saleratus, 1 of salt; bake with a moderate fire $1\frac{1}{2}$ hours. N. B.—Less flour would cause the bread to crumble in cutting. (Com. Notes: "Light, nice, good.")

No. 152. Corn Bread.—By Mrs. M. C. Walker, Middlesex Co., Mass. Five cups corn meal, 1 cup flour, 1 cup yeast, 4 cups water, 2 tablespoonfuls molasses, 1 teacupful each of saleratus and salt; set to rise 5 hours, then pour into baking dish, and allow to rise again $\frac{1}{2}$ hour. (Com. Notes: "Well baked, nice, recommended.")

No. 155. Two Corn Loaves.—By R. McDonald, Fulton Hotel, New-York City. Two lbs. corn meal, 1 lb. flour, 1 quart milk, $\frac{1}{2}$ lb. butter, $\frac{1}{2}$ lb. sugar, 2 teacupfuls cream tartar, 1 of soda. (Com. Notes: "Light, well baked, very good.") We can personally endorse the committee's report that these were very good.—Ed.

No. 163. Corn Bread.—By Mrs. M. C. Turner, New-York City. Four cups meal, $\frac{1}{2}$ cup flour, 2 cups water, 1 cup yeast, 1 spoonful sugar, 1 teaspoonful soda, 1 of salt. Place near the fire to rise quickly. Bake $1\frac{1}{2}$ hours. (Com. Notes: "Very nicely baked, light, good.")

No. 164. Sweet Corn Meal Cake.—By Mrs. M. C. Turner, New-York City. One cup of sugar, 1 cup milk, $1\frac{1}{2}$ cups corn meal, $\frac{1}{2}$ cup flour, a piece of butter the size of an egg, 1 teaspoonful ginger, $\frac{1}{2}$ teacupful soda, 2 eggs. Bake $\frac{1}{2}$ hour. (Com. Notes: "Well baked, light, of fair quality. Other samples from same contributor good.")

No. 174. Corn Cake.—By Mrs. W***, New-York City. One quart corn meal, 1 pint milk, 4 eggs, 1 cup sugar, $\frac{1}{2}$ cup butter, 1 cup stoned raisins, 1 teaspoonful salt, $\frac{1}{2}$ teacupful mace, 1 teaspoonful cinnamon, $\frac{1}{2}$ teacupful allspice; stir in enough meal to thicken a pint of milk, adding the butter and salt; when they are well mixed, pour into a pan, and add the sugar; when nearly cold, add the eggs and spices, and the raisins, if desired. Bake in a well buttered pan 2 hours. (Com. Notes: "Not quite baked enough; otherwise good. The other sample, presented by same contributor, very good.")

No. 177. Corn Bread.—By Mrs. Davis, New York City. One cup sour milk, 1 cup corn meal, 2 tablespoonfuls flour, 1 teaspoonful of sugar, $\frac{1}{2}$ teaspoonful soda; all made in five minutes, and baked in 20 minutes. (Com. Notes: "Very good.")

No. 181. Corn Bread.—By E. F. P., Queens Co., N. Y. Take 2 pints of corn meal; boil one pint in a pint of water 5 minutes; when cool, add $\frac{1}{2}$ pint water, 1 cent's worth of yeast, 1 teaspoonful salt, 1 pint wheat flour, and the remaining pint of corn meal; set in a warm place to rise; when sufficiently light, bake in a hot oven 1 hour. (Com. Notes: "A fair loaf.")

No. 184. Corn Bread.—By Mrs. L. Ryerson, Passaic Co., N. J. Two quarts corn meal, 2 quarts boiling water, 1 tablespoonful salt; mix well together and leave to cool so as not to burn the hands; then knead in with the whole of the above a yeast cake dissolved in a teacupful of warm water, and $\frac{1}{2}$ of a pint of wheat flour; set in a warm place until small cracks appear. Bake $1\frac{1}{2}$ hours. (Com. Notes: "A fine loaf, only not baked quite enough.")

No. 185. Loaf of Cake.—By Mrs. L. Ryerson, Passaic Co., N. J. Two teacupfuls each of sugar and butter, mashed together; 2 eggs well beaten and mixed with the sugar and butter; 2 teacupfuls sweet milk; a heaped teacupful of cream of tartar; 1 even teacupful of saleratus, mixed in 2 teacupfuls of wheat flour, and 2 teacupfuls of Indian meal; the whole to be mixed well together and baked 1 hour. (Com. Notes: "Very nice.")

No. 186. Corn Bread.—By Mrs. Geo. S. Wales, Monroe Co., N. Y. To wheat bread dough enough for a loaf, when light and nearly ready to be put on the pans for the last rising, add 2 quarts of corn meal, scalded in water enough to make a stiff batter; add 1 tablespoonful salt, and 1 cupful of molasses. When cooled, mix it with the bread dough, working in at the same time rye flour enough to make it into loaves as stiff as wheat bread. Put into pans and keep in a warm place until light and ready for the oven. A slow oven is best, and a longer time is required for baking than for wheat bread. This quantity makes four loaves. (Com. Notes: "Light, well baked, very good.")

No. 194. Corn Bread.—By M. A. Park, Fairfield Co., Conn. Scald 3 pints of corn meal with 1 quart of milk; let it stand over night; stir in 1 cup wheat flour, 2 tablespoonfuls molasses, 1 teacupful salt. Bake $1\frac{1}{2}$ hours. (Com. Notes: "A fair loaf.")

No. 195. Corn Cake.—By M. A. Park, Fairfield Co., Conn. One cup molasses, 1 cup sugar, $\frac{1}{2}$ cup butter, $3\frac{1}{2}$ cups corn meal, 1 cup flour, 3 eggs, 1 pint milk, a small teaspoonful of soda; spice to taste. This makes two loaves. (Com. Notes: "A fine sample.")

No. 206. A Good Corn Loaf.—By Mrs. E. A. Coon, Stark Co., Ill. One quart sour milk, 2 eggs, 1 tablespoonful each of salt and lard, 1 teacupful soda; stir to a stiff batter with a spoon. Bake in a quick oven $\frac{1}{2}$ hour. [Editor's Note.—This and No. 207, came all the way from southern Illinois ("Egypt"), and arrived after the judges left. We kept them a week longer, and in our own judgment, as well as in that of many others who tried them, they were quite palatable when two weeks old. We are glad that there is "plenty of corn in Egypt," and that there is one, at least, who knows how to cook it so well. We advise others to do likewise. Anybody who would pine on Nos. 206 and 207, ought to go hungry—if not starve.]

No. 207. A Cheap Corn Loaf.—By Mrs. E. A. Coon, Stark Co., Ill. Pour 1 quart of boiling water on a quart of corn meal; stir together, and let it stand until cool; add half a teacupful of good, sweet hop yeast, and a tablespoonful of salt. Bake in a quick oven.

No. 220. Brown Bread.—By Mrs. R. B. Neal, Tuftonboro', N. H. Three quarts Indian meal, 3 pints wheat middlings, sifted and well mixed, and 2 quarts of milk. If the weather is cold, add 1 pint of boiling water. If warm, 1 pint of the milk instead of the water, and if sweet milk is used, dissolve in it 2 teacupfuls saleratus or soda, but if the milk is sour, use sufficient to remove the acidity. Mix well and let it stand an hour or two before baking; then bake well, in a brick oven, if convenient, and it is better if left in the oven over night. This bread will keep long, and when steamed is as good as new. Yeast or yeast powders can be used instead of saleratus or soda, if preferred. The above will make one large or two small loaves, and, if properly done, cannot fail to please any lover of brown bread. It has proved good for nearly twenty years. (Rep. Notes: "Excellent.")



"GLORIOUS WINTER."

Engraved for the American Agriculturist.

The Editor with his Young Readers.

A PRETTY LARGE COMPANY—CURIOUS FIGURES.

As the teacher of a large well-ordered school feels when he points to the group of children and says to a visitor, "These are *my* scholars," so we feel as we think of the great throng of children—boys and girls of all ages—who belong to our great "Agriculturist Family"—to our school. What a company! For aught we know, they are all good boys and girls—we can't think of them otherwise. Perhaps you would each feel gratified to know something of the *size* of this company to which you belong. Everybody likes to be in a large school, or on board the biggest ship where there are the most passengers. It's something to think of, as well as tell of, when one has been a participant in a grand excursion, or a great celebration. One really attaches more value to himself, and makes more effort to act worthy of his position. Well, young friends, you belong to our great family; you will this year look upon the same beautiful pictures (like the one above); you will all read the same pages, you will all have similar thoughts, and in many respects, you will all belong to *one* company. But how *many* are there of you who thus belong to our group? Judging from the number of households to which our paper is a constant visitor, and the average number in a house old enough to read, we suppose that far more than *Two Hundred Thousand Boys and Girls* belong to the Agriculturist Family. You, dear reader, help make up this grand company. Please consider yourself introduced to the whole, and as being one of the group.... And what a group! Let's suppose only 200,000 all together, and give each one

two feet square to stand in. Hurrah! A *twenty-acre field full*, with scarcely any room outside for our friends.... Some curious thoughts are suggested as we, in imagination, look upon the grand gathering. Among all of you, there are no two just alike. Every mother could pick out her own children the moment she saw them; she would make no mistake. How is it that there is such a marked difference, when all have faces (cheeks, foreheads, chins, mouths, noses and eyes) so much alike in form and general appearance? Can you account for it? There are before us a hundred thousand bonnets and hoods, as many more hats and caps, as many coats or jackets, and as many girls' dresses. There are a hundred thousand pairs of boys' boots or shoes, and as many of girls shoes, and so on of other items of dress. How many stitches have been taken by the mothers of our group to make up all the dresses, and aprons, and skirts, the coats, pants, and the other garments? Can any of our girls tell how many stitches they each wear out in a year? Can any of the boys? Do you ever think who makes or pays for these stitches? Let us look at our whole group of young readers again. They would fill two hundred good-sized churches. They would make *two thousand* Sunday schools of one hundred scholars each. If, this year, they should each learn seven verses in the Bible every week, the whole number learned would be equivalent to *seventy-two million and eight hundred thousand verses* (72,800,000!).... Suppose each should make his or her parents or some one else happy once a day, how many times would there be happiness given this year?—*Answer*: Seventy-three million times!.... If each of you should only once a day get vexed at something, and fret about it, how

many "frets" would there be, just among our usually pleasant Agriculturist Family, during this present year? Oh! oh! *Seventy-three million frets!* Suppose all try and spend at least one week (say this week,) without fretting, or scolding, or getting vexed at all. That will blot out *fourteen hundred thousand* exhibitions of temper that do nobody else any good, but always make the fretter think less of himself or herself. Come, let's have a trial of patience for one week, beginning this hour. Please keep these black figures (**1,400,000**) before the eye, or in the mind, and each one do your part in lessening the number for this week. If you like the result of the experiment, perhaps you may try it of your own accord the second week.... "Pleasant words are as a honey-comb, sweet to the soul, and health to the bones."—So said the wise man. Not only are pleasant words "sweet to the soul" of others, but they make one's *own* soul happy. Suppose each of our two hundred thousand boys and girls use pleasant words to others—to their parents, to their brothers, or sisters, or playmates—say once a week, where they have been accustomed to use cross, or fretful, or peevish ones; they will give (and receive) "honey-comb," and "sweetness to the soul," more than a million times, this year. Dear reader, will you do your part? Will you try? "School's dismissed." The grand company will now break up, and all hasten to their homes scattered here and there all over our vast country, from Nova Scotia to California.... Here's a copy of the *February Agriculturist* to take along, to be read at each fireside. We hope you will find in it something to both please and interest you. But don't forget your part of what is to be done by the twenty-acre group you have been among to-day.

Lessons worth Learning—A Proposal.

Probably most of our young readers attend some Sunday School, and learn portions of the New Testament each week. (We hope and trust that none feel themselves "too old" to go.) But whether you live near enough to attend any School or not, it will be a very good exercise to thoroughly learn a few verses each week. Aside from any other benefit, the exercise will strengthen the memory, and on this account alone is very valuable. Below is a series of 52 lessons prepared at our suggestion by Dr. James Strong, S. T. D., (author of Harmony of the Gospels, etc.,) which embrace in chronological order, some of the leading events, parables, etc., from the Birth of Christ to the Imprisonment of Paul at Rome—a period of about 61 years. These lessons average about 7½ verses each, or 393 verses in all, and they would read well if placed together. Any one learning these in youth will have them stored in the mind indelibly. They are being adopted in many families and schools; we have circulated some thousands of copies printed in neat tabular form, and we have a large number of scholars in our own school who will learn the whole, this year. We invite all the young readers of the *Agriculturist* to join in the exercise. We can not offer premiums to all who will do so, but we will make this proposal: One year from now, (Feb. 1863,) we will print, either in the *Agriculturist*, or in a Supplement, A ROLL OF HONOR, containing the name of every one of our readers who will this year learn all the lessons in this table, and previous to Jan. 1st, 1863 send us a certificate that it is done, from the teacher, parent, or other person, who shall hear the whole recited together in December next:

TABLE OF LESSONS FOR A YEAR.

1863.	Subject.	Chapter.	Verses.
1. Jan. 1	Angels at Bethlehem.....	Luke ii.	8 to 14
2. " 12	Visit of the Magians.....	Matt. ii.	1 to 12
3. " 19	Christ at twelve Years of Age.....	Luke ii.	42 to 49
4. " 28	The Baptism of Jesus.....	Mark i.	4 to 11
5. Feb. 2	Christ's Temptation.....	Matt. iv.	3 to 10
6. " 9	Interview with Nicodemus.....	John iii.	1 to 8
7. " 16	Christ equal with the Father.....	John v.	18 to 24
8. " 23	Doctrine of the Sabbath.....	Mark ii.	23 to 28
9. Mar. 2	Parable of the Sower.....	Matt. xiii.	3 to 9
10. " 9	Calling of the Twelve.....	Matt. x.	1 to 7
11. " 16	John's Imprisonment.....	Mark vi.	21 to 29
12. " 23	Christ the Bread of Life.....	John vi.	26 to 33
13. " 30	The Transfiguration.....	Matt. xvii.	1 to 8
14. April 6	Necessity of Child-like temper.....	Matt. xviii.	1 to 7
15. " 13	Appointment of the Seventy.....	Luke x.	1 to 7
16. " 20	Parable of the Good Samaritan.....	Luke x.	30 to 37
17. " 27	The Lord's Prayer.....	Luke xi.	1 to 8
18. May 4	Christ the Good Shepherd.....	John x.	1 to 7
19. " 11	Parable of the Prodigal Son.....	Luke xv.	11 to 19
20. " 18	The Lord's Supper.....	1 Cor. xi.	23 to 29
21. " 25	The Agony in Gethsemane.....	Luke xxii.	39 to 46
22. June 1	Seizure of Christ.....	Luke xxii.	47 to 53
23. " 8	Peter's Denial.....	Luke xxii.	54 to 62
24. " 15	Christ before Sanhedrim.....	Luke xxiii.	63 to 71
25. " 22	Christ before Pilate.....	Luke xxiii.	1 to 7
26. " 29	Christ before Herod.....	Luke xxiii.	8 to 16
27. July 6	Christ Sentenced by Pilate.....	Luke xxiii.	18 to 25
28. " 13	The Crucifixion.....	Luke xxiii.	32 to 38
29. " 20	Death of Christ.....	Luke xxiii.	44 to 48
30. " 27	The Sepulchre Guarded.....	Matt. xxvii.	61 to 66
31. Aug. 3	Resurrection of Christ.....	Mark xvi.	1 to 8
32. " 10	Christ's Appearances.....	Mark xvi.	9 to 16
33. " 17	The Ascension.....	Acts i.	6 to 12
34. " 24	Gift of the Holy Spirit.....	Acts i.	1 to 7
35. " 31	Peter & John before Sanhedrim.....	Acts iv.	5 to 12
36. Sept. 7	Community of Goods.....	Acts iv.	31 to 37
37. " 14	Martyrdom of Stephen.....	Acts vii.	54 to 60
38. " 21	Conversion of Paul.....	Acts ix.	1 to 8
39. " 28	Conversion of Cornelius.....	Acts x.	11 to 17
40. Oct. 5	Founding of Church at Antioch.....	Acts xi.	19 to 26
41. " 12	Peter delivered from Prison.....	Acts xii.	1 to 7
42. " 19	Paul appointed Missionary.....	Acts xii.	24 to 28
43. " 26	Decree of Council of Jerusalem.....	Acts xv.	22 to 29
44. Nov. 3	Philippi Jailer Converted.....	Acts xvi.	25 to 31
45. " 9	Paul's Preaching at Athens.....	Acts xvii.	22 to 28
46. " 16	Tumult at Ephesus.....	Acts xix.	21 to 27
47. " 23	Arrest of Paul at Jerusalem.....	Acts xxi.	27 to 33
48. " 30	Paul begins Voyage to Rome.....	Acts xxvii.	1 to 8
49. Dec. 7	Storm during Paul's Passage.....	Acts xxvii.	13 to 20
50. " 14	Paul Encourages Mariners.....	Acts xxvii.	27 to 34
51. " 21	Escape from the Wreck.....	Acts xxvii.	38 to 44
52. " 28	Paul's Arrival at Rome.....	Acts xxviii.	11 to 16

N. B. The figures in the last column denote the verse beginning and the verse ending the lesson—both are included.

We ought to have printed this in the *January Agriculturist*, but it was not completed when that number went to press. A little extra effort will bring up the four lessons for January. While learning these lessons, it would be well to read the intervening portions of sacred history.

NOTE TO EDITORS AND SUPERINTENDENTS.—The above can be published by any editor desiring to do so—it was copyrighted merely to stop its use for speculative purposes. Superintendents can obtain neat printed copies of the above size, or those 7x9 inches, at cost of printing—say 25 cts. to \$1 per 100, according to whether printed on thin or thick paper, or on cards. We have furnished a copy to every teacher and scholar in our own school.



An Interesting Coin.

Our old correspondent, "Whistler at the Plow," sends for the *Agriculturist* boys and girls, a picture of a copper coin he recently found in his field not far from New Brunswick, N. J. We find one like it in this City, at the store of a Numismaticist (that is a dealer in old coins and medals). He values it at a good many dollars on account of its scarcity. It is, we believe, one of the first copper coins made in this country after the declaration of Independence, in 1776. We give an engraving showing the exact size, and the embossing or raised lines and characters on the two sides. On one side are 13 bars or stripes, representing the thirteen colonies, or States, which united in the Declaration of Independence of Great Britain. On the other side, the letters USA. stand for United States of America. They are so closely united or blended as to form but one character, thus representing the Union. The character somewhat resembles the dollar mark, (\$), and some have given this coin as the origin of that mark. We think, however, that the \$ mark had another and earlier origin.

No Boy Wholly Bad.

"I can't be good, and I won't try."—So said a boy in our hearing, the other day. He is an active, bright boy, full of fun, and nearly, but not quite, half full of mischief. He is kind hearted, loves approbation, and from the bottom of his heart would like to deserve to be called a good boy. He is sensitive to the opinions of others, and when for the fun of the thing, or carelessly, he has committed an error and been reproved for it, his mind dwells upon the reproach so much that he has come to think that about all he does worthy of notice is bad.—A great mistake this and likely to lead to bad consequences. No one is in a more hopeless condition than he who has lost confidence in himself. Now we happen to know something of the heart of that boy. We have studied his character for months, and though he has the reputation of being a bad boy, we know he has many more good traits than bad ones, and that, if he only thought so himself, he has the ability to be one of the smartest and best boys we are acquainted with. We hope he will see this item in the *Agriculturist*, and suspect it is in part intended for him.—Perhaps, reader, you may be in a similar state of mind. Your parents and teachers may be so constantly oppressed with labor and care that they may not have the time, or discretion, to do more than tell you of your wrong deeds. But don't get discouraged. We have known and cared for many hundreds of boys and girls, in the Sabbath school, and elsewhere, and some of them were called bad by almost every body, but we never yet knew one who had not many more good traits than bad ones. It is so with you my lad, we know it is. Remember this, and think more of your good feelings and impulses, and then you will cherish these, and they will increase and grow. Pray don't fall into, or remain in that fatal error of thinking that you are all bad, and that therefore there is no use of your trying to be good. As your friend we tell you it is not so!

Have the Boys a Tool Chest?

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No. 1. A watch over a ewer (pitcher), a hart (male deer), a fig. 2, a key, a person pointing (p out), an awl, and a vise. It would read: Watch over ewer, hart, two, key, pout, awl, vise,—or the Answer is: Watch over your heart to keep out all vice.



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"Commodore Nutt."

Some of our boys doubtless feel it quite an affliction to be small, and are anxious for the time to come when they will be grown up men. We had a pleasant visit with a man the other day who will no doubt find it quite advantageous to be so small. Why, he is not taller than our three-year old Charlie and not near so heavy. Though over 18 years old we picked him up in one hand very easily; he weighs less than half a bushel of corn. We forgot to measure him, but he will have to look up to see the face of Tom Thumb, certainly. Mr. Barnum has got hold of him, and he will doubtless soon be famous. He is the son of Major Nutt of Manchester, N. H., and as Barnum has had a general (Tom Thumb), he names his new protegee "Commodore"—Commodore Nutt—perhaps also in compliment to the Navy, which appears to be reaping all the honors in the war. We commissioned our humorous artist to show up the Commodore appropriately in the *Agriculturist*, ahead of all others if possible.



"GLORIOUS WINTER."

Engraved for the American Agriculturist.

The Editor with his Young Readers.

A PRETTY LARGE COMPANY—CURIOUS FIGURES.

As the teacher of a large well-ordered school feels when he points to the group of children and says to a visitor, "These are *my* scholars," so we feel as we think of the great throng of children—boys and girls of all ages—who belong to our great "Agriculturist Family"—to our school. What a company! For aught we know, they are all good boys and girls—we can't think of them otherwise. Perhaps you would each feel gratified to know something of the *size* of this company to which you belong. Everybody likes to be in a large school, or on board the biggest ship where there are the most passengers. It's something to think of, as well as tell of, when one has been a participant in a grand excursion, or a great celebration. One really attaches more value to himself, and makes more effort to act worthy of his position. Well, young friends, you belong to our great family; you will this year look upon the same beautiful pictures (like the one above); you will all read the same pages, you will all have similar thoughts, and in many respects, you will all belong to one company. But how many are there of you who thus belong to our group? Judging from the number of households to which our paper is a constant visitor, and the average number in a house old enough to read, we suppose that far more than *Two Hundred Thousand Boys and Girls* belong to the Agriculturist Family. You, dear reader, help make up this grand company. Please consider yourself introduced to the whole, and as being one of the group.... And what a group! Let's suppose only 200,000 all together, and give each one

two feet square to stand in. Hurrah! A twenty-acre field full, with scarcely any room outside for our friends.... Some curious thoughts are suggested as we, in imagination, look upon the grand gathering. Among all of you, there are no two just alike. Every mother could pick out her own children the moment she saw them; she would make no mistake. How is it that there is such a marked difference, when all have faces (cheeks, foreheads, chins, mouths, noses and eyes) so much alike in form and general appearance? Can you account for it? There are before us a hundred thousand bonnets and hoods, as many more hats and caps, as many coats or jackets, and as many girls' dresses. There are a hundred thousand pairs of boys' boots or shoes, and as many of girls' shoes, and so on of other items of dress. How many stitches have been taken by the mothers of our group to make up all the dresses, and aprons, and skirts, the coats, pants, and the other garments? Can any of our girls tell how many stitches they each wear out in a year? Can any of the boys? Do you ever think who makes or pays for these stitches? Let us look at our whole group of young readers again. They would fill two hundred good-sized churches. They would make two thousand Sunday schools of one hundred scholars each. If, this year, they should each learn seven verses in the Bible every week, the whole number learned would be equivalent to *seventy-two million and eight hundred thousand verses* (72,800,000!).... Suppose each should make his or her parents or some one else happy once a day, how many times would there be happiness given this year?—Answer: Seventy-three million times!.... If each of you should only once a day get vexed at something, and fret about it, how

many "frets" would there be, just among our usually pleasant Agriculturist Family, during this present year? Oh! oh! *Seventy-three million frets!* Suppose all try and spend at least one week (say this week,) without fretting, or scolding, or getting vexed at all. That will blot out *fourteen hundred thousand* exhibitions of temper that do nobody else any good, but always make the fretter think less of himself or herself. Come, let's have a trial of patience for one week, beginning this hour. Please keep these black figures (**1,400,000**) before the eye, or in the mind, and each one do your part in lessening the number for *this* week. If you like the result of the experiment, perhaps you may try it of your own accord the second week.... "*Pleasant words are as a honey-comb, sweet to the soul, and health to the bones.*"—So said the wise man. Not only are pleasant words "sweet to the soul" of others, but they make one's *own* soul happy. Suppose each of our two hundred thousand boys and girls use pleasant words to others—to their parents, to their brothers, or sisters, or playmates—say once a week, where they have been accustomed to use cross, or fretful, or peevish ones; they will give (and receive) "honey-comb," and "sweetness to the soul," more than a million times, this year. Dear reader, will you do your part? Will you try? "School's dismissed." The grand company will now break up, and all hasten to their homes scattered here and there all over our vast country, from Nova Scotia to California.... Here's a copy of the *February Agriculturist* to take along, to be read at each fireside. We hope you will find in it something to both please and interest you. But don't forget your part of what is to be done by the twenty-acre group you have been among to day.

Lessons worth Learning—A Proposal.

Probably most of our young readers attend some Sunday School, and learn portions of the New Testament each week. (We hope and trust that none feel themselves "too old" to go.) But whether you live near enough to attend any School or not, it will be a very good exercise to thoroughly learn a few verses each week. Aside from any other benefit, the exercise will strengthen the memory, and on this account alone is very valuable. Below is a series of 52 lessons prepared at our suggestion by Dr. James Strong, S. T. D., (author of *Harmony of the Gospels*, etc.,) which embrace in *chronological order*, some of the leading events, parables, etc., from the Birth of Christ to the Imprisonment of Paul at Rome—a period of about 61 years. These lessons average about $7\frac{1}{2}$ verses each, or 393 verses in all, and they would read well if placed together. Any one learning these in youth will have them stored in the mind indelibly. They are being adopted in many families and schools; we have circulated some thousands of copies printed in neat tabular form, and we have a large number of scholars in our own school who will learn the whole, this year. We invite all the young readers of the *Agriculturist* to join in the exercise. We can not offer premiums to all who will do so, but we will make this proposal: One year from now, (Feb. 1863,) we will print, either in the *Agriculturist*, or in a Supplement, A ROLL OF HONOR, containing the name of every one of our readers who will this year learn all the lessons in this table, and previous to Jan. 1st, 1863 send us a certificate that it is done, from the teacher, parent, or other person, who shall hear the whole recited together in December next:

TABLE OF LESSONS FOR A YEAR.			
1862.	Subject.	Chapter.	Verses.
1. Jan. 1.	Angels at Bethlehem.....	Luke ii.	8 to 14
2. " 2.	Visit of the Magi.....	Luke ii.	15 to 17
3. " 3.	Christ at twelve Years of Age.....	Luke ii.	42 to 49
4. " 4.	The Baptist's Mission.....	Mark i.	4 to 11
5. Feb. 2.	Christ's Temptation.....	Matt. iv.	1 to 11
6. " 6.	Interview with Nicodemus.....	John iii.	1 to 8
7. " 7.	Christ equal with the Father.....	John vi.	13 to 24
8. " 8.	Doctrine of the Sabbath.....	Mark ii.	23 to 28
9. Mar. 2.	Parable of the Sower.....	Matt. xiii.	8 to 9
10. " 9.	Calling of the Twelve.....	Matt. x.	1 to 7
11. " 11.	John's Imprisonment.....	Luke x.	21 to 29
12. " 12.	Christ the Bread of Life.....	John vi.	26 to 33
13. " 13.	The Transfiguration.....	Matt. xvii.	1 to 8
14. April 6.	Necessity of Child-like temper.....	Matt. xviii.	1 to 7
15. " 15.	Appointment of the Seventy.....	Luke x.	1 to 7
16. " 16.	Parable of the Good Samaritan.....	Luke x.	30 to 37
17. " 17.	The Lord's Prayer.....	Luke xi.	1 to 8
18. May 4.	Christ the Good Shepherd.....	John x.	1 to 7
19. " 11.	Parable of the Prodigal Son.....	Luke xv.	11 to 19
20. " 19.	The Lord's Supper.....	1 Cor. xi.	23 to 29
21. " 25.	The Agony in Gethsemane.....	Luke xxi.	39 to 46
22. June 1.	Seizure of Christ.....	Luke xxi.	47 to 53
23. " 8.	Peter's Denial.....	Luke xxi.	54 to 62
24. " 15.	Christ before the Sanhedrim.....	Luke xxi.	63 to 71
25. " 22.	Christ before Pilate.....	Luke xxi.	1 to 7
26. " 28.	Christ before Herod.....	Luke xxi.	8 to 16
27. July 6.	Christ Sentenced by Pilate.....	Luke xxi.	18 to 25
28. " 13.	The Crucifixion.....	Luke xxi.	32 to 38
29. " 20.	Death of Christ.....	Luke xxi.	44 to 53
30. " 27.	The Sepulchre Guarded.....	Matt. xxvii.	61 to 66
31. Aug. 3.	Resurrection of Christ.....	Mark xvi.	1 to 8
32. " 10.	Christ's Appearances.....	Mark xvi.	9 to 16
33. " 17.	The Ascension.....	Acts i.	6 to 12
34. " 24.	Gift of the Holy Spirit.....	Acts ii.	1 to 7
35. " 31.	Peter & John before Sanhedrim.....	Acts iv.	5 to 12
36. Sept. 7.	Community of Goods.....	Acts iv.	32 to 37
37. " 14.	Martyrdom of Stephen.....	Acts vi.	54 to 60
38. " 21.	Conversion of Paul.....	Acts ix.	1 to 8
39. " 28.	Conversion of Cornelius.....	Acts xi.	11 to 17
40. Oct. 5.	Founding of Church at Antioch.....	Acts xii.	19 to 26
41. " 12.	Peter delivered from Prison.....	Acts xii.	1 to 7
42. " 19.	Paul appointed Missionary.....	Acts xiii.	24 to xiii.
43. " 26.	Decree of Council of Jerusalem.....	Acts xv.	22 to 29
44. Nov. 2.	Philippi Jailer Converted.....	Acts xvi.	25 to 31
45. " 9.	Paul's Preaching at Athens.....	Acts xvii.	22 to 28
46. " 16.	Tumult at Ephesus.....	Acts xix.	21 to 27
47. " 23.	Arrest of Paul at Jerusalem.....	Acts xxi.	27 to 33
48. " 30.	Paul begins Voyage to Rome.....	Acts xxvii.	1 to 8
49. Dec. 7.	Storm during Paul's Passage.....	Acts xxvii.	13 to 20
50. " 14.	Paul Encourages Mariners.....	Acts xxvii.	27 to 34
51. " 21.	Escape from the Wreck.....	Acts xxvii.	35 to 44
52. " 28.	Paul's Arrival at Rome.....	Acts xxviii.	11 to 16

N. B. The figures in the last column denote the verse beginning and the verse ending the lesson—both are included.

We ought to have printed this in the *January Agriculturist*, but it was not completed when that number went to press. A little extra effort will bring up the four lessons for January. While learning these lessons, it would be well to read the intervening portions of sacred history.

NOTE TO EDITORS AND SUPERINTENDENTS.—The above can be published by any editor desiring to do so—it was copyrighted merely to stop its use for speculative purposes. Superintendents can obtain neat printed copies of the above size, or those 7x9 inches, at cost of printing—say 25 cts. to \$1 per 100, according to whether printed on thin or thick paper, or on cards. We have furnished a copy to every teacher and scholar in our own school.



An Interesting Coin.

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From a Humorous Correspondent.

More About the Corn Bread Exhibition.

MR. EDITOR:—You took the liberty to print my letter and pencilings, long ears and all, in last November's *Agriculturist*. That was putting it on rather thick—perhaps none too much so, for we were the



NUMBER ONE.

tallest kind of mules, to send off our money to that New-Hampshire "Lottery," because it was sugar-coated over with "Grand Social Banquet," "Mechanics' Union," etc. But since you have shown me up when I WAS humbugged, I will give you a chance to exhibit me when I WASN'T. You see, we've been using fine wheat flour for many years, as about our only food. Lately it seemed to pack in the stomach, just as if



NUMBER TWO.

you should wet up a piece of bread, and make it into a mass of dough. When it got into the stomach, the gastric juice couldn't dissolve the lump readily; and when it did, there were no coarse particles to stimulate the digestive apparatus to action, such as Nature supplies when she makes a kernel of wheat with bran on it. The consequence was, we had the dyspepsia very badly, wife and I had—particularly me. I frequently had to take medicine as an internal stimulant, in place of coarse particles of food. The result was, I became so thin that I often heard the boys

whisper: "There goes Smith's shadow." You can see how I looked, by the sketch NUMBER ONE, sent herewith. Well, wife and I happened down to York in December. (The fact was, our oldest daughter, who is married out West, had sent some of her best corn bread to the Exhibition, and expected the premium, and so we purposely happened there just at the right time to look after her honors.) We didn't find just what we expected: we found a great deal more, I tell you; and I wanted to come right to your desk, Mr. Editor, and tell you how surprised I was; but wife wouldn't let me—she said that if I made myself known, you would be looking after my ears, and so I kept shy of you. But, to cut my story short, wife got so interested in corn bread that she brought home lots of recipes, and has been making corn bread and corn cake for every meal since. That's only a month, and what the effect is you can see by my present portrait, NUMBER TWO, also sent herewith. All this comes from eating bread that don't pack in one's stomach. Perhaps a little is due to the oil or fat in the corn.

Yours, etc.

Barnstable Co., Mass., Jan. 18, 1862.

New-York Live Stock Trade for 1861.

Accounts are kept at the Office of the *Agriculturist*, of all the receipts at the regular yards of live animals destined for slaughter, milch cows, etc. These accounts are gathered at the yards themselves, and not from newspaper reports. Our Monthly Reviews are made up from these, and we also furnish the reports of each market to some of our leading Daily and Weekly journals. The following record from our books will be interesting, and useful for future reference. It gives for each week in the year, the receipts of the different kinds of animals, and the weekly average price of all beef cattle sold. The price is in cents per pound for the estimated weight of the dressed carcasses:

WEEKLY RECEIPTS FOR 1861.									
1861.	Total	Net	Milch	Veal	Sheep	Lice	Total	Net	Total
Week	Receipts	Price	Cows.	Cattle.	Lambs.	Hogs.	Receipts	Price	Receipts
Jan. 1...	2,771	8 1/2	111	326	6,368	12,010	21,321	12,010	21,321
Jan. 8...	4,398	8 1/2	77	305	5,964	19,069	29,903	8 1/2	29,903
Jan. 15...	3,977	8 1/2	106	339	9,711	11,322	25,482	8 1/2	25,482
Jan. 22...	4,701	7 3/4	81	361	5,548	8,215	19,508	7 3/4	19,508
Jan. 29...	3,953	7 3/4	90	375	7,874	9,586	21,928	7 3/4	21,928
Feb. 5...	4,068	7 3/4	113	370	7,423	8,672	20,570	7 3/4	20,570
Feb. 12...	3,663	7 3/4	85	361	8,437	8,382	17,938	7 3/4	17,938
Feb. 19...	3,765	7 3/4	98	400	8,128	7,616	20,113	7 3/4	20,113
Feb. 26...	3,233	8 1/2	84	322	5,670	4,710	14,019	8 1/2	14,019
Mar. 5...	3,653	8 1/2	95	432	5,880	6,624	16,648	8 1/2	16,648
Mar. 12...	3,304	8 1/2	119	422	6,277	5,706	18,518	8 1/2	18,518
Mar. 19...	4,549	8 1/2	153	508	6,705	8,539	16,537	8 1/2	16,537
Mar. 26...	4,720	7 3/4	130	578	4,818	6,825	17,121	7 3/4	17,121
Apr. 2...	3,745	7 3/4	147	800	7,851	8,002	20,639	7 3/4	20,639
Apr. 9...	4,372	7 3/4	108	682	4,988	9,134	18,579	7 3/4	18,579
Apr. 16...	4,518	7 3/4	121	951	8,176	6,063	19,328	7 3/4	19,328
Apr. 23...	3,845	7 3/4	75	1,133	8,845	6,915	20,209	7 3/4	20,209
Apr. 30...	3,942	8 1/2	81	987	6,054	7,920	18,934	8 1/2	18,934
May 7...	4,637	8 1/2	77	787	6,031	10,102	21,634	8 1/2	21,634
May 14...	4,336	8 1/2	128	1,187	4,489	8,859	19,000	8 1/2	19,000
May 21...	4,936	8 1/2	105	1,301	8,461	5,156	19,559	8 1/2	19,559
May 28...	3,519	8 1/2	121	940	9,023	4,709	18,571	8 1/2	18,571
June 4...	4,654	8 1/2	127	825	6,648	6,888	19,142	8 1/2	19,142
June 11...	3,688	8 1/2	109	1,087	10,971	5,405	21,321	8 1/2	21,321
June 18...	3,766	8 1/2	123	1,111	9,094	4,236	19,064	8 1/2	19,064
June 25...	4,845	8 1/2	110	875	10,215	5,351	22,329	8 1/2	22,329
July 2...	4,099	8 1/2	86	414	11,800	7,602	24,003	8 1/2	24,003
July 9...	4,250	7 3/4	111	765	11,162	4,268	20,556	7 3/4	20,556
July 16...	3,744	7 3/4	136	1,344	12,523	4,409	21,646	7 3/4	21,646
July 23...	3,326	8	87	600	11,095	2,508	17,616	8	17,616
July 30...	5,022	7 3/4	104	615	11,212	6,491	23,444	7 3/4	23,444
Aug. 6...	3,797	7 3/4	122	394	15,097	5,890	22,346	7 3/4	22,346
Aug. 13...	4,418	7 3/4	145	570	12,097	9,828	21,158	7 3/4	21,158
Aug. 20...	4,608	7 3/4	174	656	17,361	5,620	28,419	7 3/4	28,419
Aug. 27...	3,223	7 3/4	124	418	12,153	5,204	21,122	7 3/4	21,122
Sept. 3...	4,530	8	129	496	14,329	4,004	23,486	8	23,486
Sept. 10...	3,821	7 3/4	85	474	18,260	7,078	26,714	7 3/4	26,714
Sept. 17...	4,151	7 3/4	91	545	13,234	6,490	24,520	7 3/4	24,520
Sept. 24...	3,102	7 3/4	103	539	14,080	9,391	29,415	7 3/4	29,415
Oct. 1...	4,774	7 3/4	109	922	13,465	7,854	27,124	7 3/4	27,124
Oct. 8...	3,993	7 3/4	132	463	12,934	8,944	26,425	7 3/4	26,425
Oct. 15...	3,187	7 3/4	97	507	13,919	9,587	29,361	7 3/4	29,361
Oct. 22...	3,177	7 3/4	130	633	11,412	9,828	26,640	7 3/4	26,640
Oct. 29...	3,154	7 3/4	103	484	16,106	18,809	41,655	7 3/4	41,655
Nov. 5...	3,835	7 3/4	100	548	10,759	13,380	28,652	7 3/4	28,652
Nov. 12...	3,945	7 3/4	104	704	14,370	26,536	47,629	7 3/4	47,629
Nov. 19...	4,103	7 3/4	121	708	14,670	27,773	47,283	7 3/4	47,283
Nov. 26...	3,638	7 3/4	100	606	12,147	34,000	49,690	7 3/4	49,690
Dec. 3...	3,961	7 3/4	88	480	10,190	33,888	48,607	7 3/4	48,607
Dec. 10...	4,295	7 3/4	100	534	8,839	36,753	50,521	7 3/4	50,521
Dec. 17...	4,091	8	151	581	9,863	38,290	52,785	8	52,785
Dec. 24...	3,226	8 1/2	73	176	8,063	15,502	28,047	8 1/2	28,047
Dec. 31...	3,389	8 1/2	86	294	7,733	40,488	52,400	8 1/2	52,400
Total...	226,312	8 1/2	5,816	33,388	527,358	598,509	1,867,327	8 1/2	1,867,327
Average...	4,370	7 4 1/2	110	630	9,950	11,292	36,182	7 4 1/2	36,182

TOTAL RECEIPTS OF LIVE ANIMALS FOR 2 YEARS.

Beefes.	Cows.	Cattle.	Sheep.	Swine.	All kinds.
1861. 226,312	5,816	33,388	527,358	598,509	1,867,327
1860. 226,747	7,154	40,162	514,191	519,633	1,107,863

AVERAGE WEEKLY RECEIPTS FOR 2 YEARS.

Beefes.	Prices.	Cows.	Veals.	Sheep.	Swine.	All kinds.
1861. 4,370	7 4 1/2	110	630	9,950	11,292	36,182
1860. 4,300	8 1 1/2	138	772	9,888	6,147	21,305

Notes.—The second and last days of 1861 were general market days; the total receipts are really for 53 weeks. The number of beef cattle for the two years was very nearly the same, but the average business for 52 weeks in 1860, is a little higher. The net price of

beef averaged 2-10ths of a cent, or 4 mills per lb. lower in 1861 than in 1860. Fewer cows were required last year, as the better pasturage secured more milk from the cows kept. The number of live hogs nearly doubled, owing to the disturbed condition of the hog-slaughtering towns along the Ohio and Mississippi rivers, and the blockade of the Mississippi, which stopped the usual shipping of pork down that channel. It will be seen by the table that for the closing weeks of the year, 18,000 to 40,000 live hogs were brought to New-York, against a weekly average of 6,147 for all of 1860. The receipts of hogs have been even larger since Jan. 1.

DERIVATION OF BEEF CATTLE.

We have gathered, weekly, the sources of the cattle brought to the Forty-fourth-street Yards, at which place were sold 192,375 of the 226,312 beef cattle brought to this City in 1861. These 192,375 came direct to the market from the following States:

Illinois.....	80,459	Canada.....	1,063
Ohio.....	36,654	Pennsylvania.....	1,031
New-York.....	29,052	Connecticut.....	805
Iowa.....	11,205	New-Jersey.....	508
Kentucky.....	8,189	Wisconsin.....	120
Michigan.....	4,898	Choctaw Nation.....	100
Missouri.....	3,736	Massachusetts.....	67
Virginia.....	1,117	Texas.....	50

N. B.—These are the points from which the cattle last came. Many cattle were brought Eastward and pastured for a season before coming to market, and were credited to the last pasture ground. This was largely the case with those set down for New-York State. From this fact, and from other sources of information, we estimate that the great pasturing and corn-growing State of Illinois furnished more than half of all the immense supplies of beef cattle brought to New-York City during 1861.

Figures in a Meat Bill—Interesting Items.

We give in another article a summary of the live animals brought to New-York City during 1861. These figures, with some account of the cost, etc., as prepared originally in the office of the *Agriculturist*, are being published throughout the country, generally without any credit as to their origin. We will bring together here a few items of interest. First as to the mode of selling.

BEEF CATTLE, are sold by the head, at a price based upon the weight of the dressed carcass. This weight averages not far from 55 lbs. for each 100 lbs. of live weight; fine fat cattle sometimes dress 60 to 65 lbs., and poorer grades run below 50 lbs. The average net price of all cattle sold in 1861 was about 7 cents and 8 mills per lb., the sales ranging from 4c. to 11c. per lb., for different grades, and at different seasons.

HOW OTHER ANIMALS ARE SOLD.—*Milch Cows*, are sold by the head, with or without the calf.—*Veal Calves*, are sold by the pound live weight.—*Sheep and Lambs* are sold at so much a head for a lot, or the pick of a lot, but the price is reported at the price per lb. live weight.—*Live Hogs*, are sold by the pound, live weight.

AVERAGE WEIGHTS AND PRICES.—*Beef Cattle*: The average net weight (dressed carcass) of all the live beef cattle sold last year was about 730 lbs. each. Average price 7 cents 8 mills per lb., or \$58.40. Add to this for the offal, as below, \$11.61, and we have the average price of all the cattle, large and small = \$68.55 each.

Milch Cows: Average price for 1861 about \$32.

Veal Calves: Shrinkage in killing and dressing, about 35 lbs. in the 100 lbs. Average live weight about 120 lbs., average price about 4 1/2 c. per lb.; average per head = \$5.10.

Sheep and Lambs: Shrinkage in killing about 40 lbs. in 100 lbs. Average live weight of sheep about 95 lbs., and of lambs about 70 lbs.; average of all of both kinds 85 lbs., average price, 4 1/2 c.; average price per head = \$3.82 1/2.

Live Hogs: Shrinkage in killing about 22 lbs. in 100 lbs. Average live weight, 170 lbs., average price per lb. 4 1/2 c.; average per head = \$7.65.

BEEVES' OFFAL.—This includes Skin, Rough Tallow, Head, Tongue, Feet, Heart, Liver, Tripe, Intestines, and Manure, or strippings. All these articles are turned to account by the butcher, and are not reckoned in the carcass value, which we have put at 730 lbs. and 7 cents 8 mills per lb. The offal for last year averaged about as follows: *Skin*, average 87 lbs., average price about 5 1/2 c. = \$4.78 1/2. (The price varied during the year from 3 1/2 c. to 9 c. per lb.)—*Rough Tallow*, average 75 lbs., average price 7 c. = \$5.25.—*Heads* sold for about 25 cents each.—*Tongues* varied from 30c. to 56c. each, average any 35c. *Feet* averaged about 28c., varying from 25c. to 30c.—*Hearts* averaged about 6 lbs. and sold for only about 10 cents each.—*Livers* weigh about 10 lbs., and sold for an average of 30 cents each.—*Tripe* is nearly all used here, and is sold at an average of about 15 cents per animal.—*The Intestines* are generally stripped and used for Bologna sausages, etc., at 5 cents per animal. *The Manure*, or strippings of the tripe (stomach), and intestines, is also

sold at about 5 cents per animal. The intestines and manure are perquisites of the butcher boys, but as these are part of their pay, they should be reckoned into the value of the animal. The total value of the offal last year, therefore, averaged per animal, \$11.61.

GENERAL SUMMARY FOR 1861.

226,312 Beef Cattle at \$68.55 each.....\$15,513,687.60
598,509 Live Hogs at \$7.65 each.....4,578,593.86
527,358 Sheep and Lambs at \$3.82½ each.....2,037,144.35
33,398 Veal Calves at \$5.10 each.....170,279.80
5,816 Milch Cows at \$32.00 each.....186,112.00
Total (including cows).....\$22,289,675.61

Total fresh Meat Bill for 1861.....\$22,289,675.61

Over Twenty-two Million Dollars for the wholesale value of live Bees, Hogs, Sheep, and Veals, at the time of delivering from the yards. The profits while passing from the sales yards to consumers, are not taken into account. Nor does the above include all the fresh meat brought here. Butchers buy many animals direct from farmers, and large numbers of all kinds are brought in ready dressed, having been slaughtered elsewhere.

POUNDS OF MEAT IN THE ABOVE.

226,312 Bees, at 730 lbs., dressed weight.....165,208,760 lbs.
598,509 Hogs, at 132 lbs. do.....79,003,188 lbs.
527,358 Sheep, at 51 lbs. do.....26,895,258 lbs.
33,398 Veals, at 78 lbs. do.....2,604,264 lbs.

Total pounds of meat slaughtered.....273,711,470

Two Hundred and Seventy-three Million Pounds of Fresh Meat in a Single Year, for this Single City of Gotham!—But these are only the animals brought in alive, and slaughtered here. It does not include the large number of animals bought by butchers daily of farmers, nor those sold from barges at the wharves, nor the immense number of dressed carcasses brought in, to say nothing of salted meats, of poultry, of game, of fish, of oysters, etc. It will be understood, however, that not all this meat is actually consumed by the million people on Manhattan Island. The neighboring cities and country, the army, and the ships, obtain much of their animal food from this City. But with these drawbacks, the slaughter going on here is wonderful—1,387,616 animals killed here in a single year! At ten hours a day, this implies the killing of 4,448 for each working day, 445 each hour, and more than seven for every minute!

Market Review, Weather Notes, etc.

AMERICAN AGRICULTURIST OFFICE.
New-York, Monday Morning, Jan. 20, 1862.

* * The materials for this review are furnished specially for the *Agriculturist* by a reliable man of long experience, who, throughout the year, spends the whole of each business day in the markets, watching the transactions and collecting information, and we flatter ourselves that this report is one of the most correct anywhere published.

CURRENT WHOLESALE PRICES.

	Dec. 20.	Jan. 20.
Flour—Super to Extra State	\$5 40 @ 5 85	\$5 45 @ 5 90
Superfine Western.....	5 35 @ 5 50	5 40 @ 5 55
Extra Western.....	5 60 @ 7 00	5 70 @ 7 00
Fancy to Extra Genesee.....	5 90 @ 7 00	5 95 @ 7 00
Super to Extra Southern.....	5 30 @ 5 50	5 40 @ 5 60
Rye Flour—Fine and Super.....	3 10 @ 4 50	3 00 @ 4 30
CORN MEAL.....	3 10 @ 3 50	2 90 @ 3 30
WHEAT—Canada White.....	1 45 @ 1 50	1 45 @ 1 50
Western White.....	1 44 @ 1 51	1 44 @ 1 52½
All kinds of Red.....	1 24 @ 1 45	1 25 @ 1 45
Corn—Yellow.....	67 @ 68	66 @ 67
White.....	67 @ 68	66 @ 67
Mixed.....	66 @ 67	65 @ 66
OATS—Western.....	42½ @ 43½	41 @ 42
State.....	42 @ 43	41 @ 42
RYE.....	82 @ 85	81 @ 84
BARLEY.....	65 @ 80	72 @ 80
HAY, in bales, per 100 lbs.....	70 @ 85	85 @ 1 00
COTTON—Middlelands, per lb.....	38 @ 40	32 @ 34
RICE, per 100 lbs.....	50 @ 75	65 @ 75
HOPS, crop of 1861, per lb.....	16 @ 23	17 @ 24
FEATHERS, Live Geese, p. lb.....	32 @ 38	30 @ 36
SEED—Clover, per lb.....	7½ @ 7½	7 @ 7½
Timothy, per bushel.....	1 87½ @ 2 25	2 00 @ 2 12½
SUGAR—Brown, per lb.....	7¼ @ 9½	7 @ 9¼
MOLASSES, New-Orleans p. gal.....	50 @ 55	50 @ 50
COFFEE, Rio, per lb.....	17 @ 19	17½ @ 20
TOBACCO—Kentucky, &c. p. lb.....	9 @ 17	9 @ 17
Seed Leaf, per lb.....	5 @ 20	6 @ 21
WOOL—Domestic, pulled, per lb.....	43 @ 53	44 @ 54
Domestic, pulled, per lb.....	38 @ 50	38 @ 50
TALLOW, per lb.....	9¼ @ 9¼	9¼ @ 9¼
OIL CAKE, per ton.....	34 00 @ 40 00	32 00 @ 37 50
PORK—Mess, per bbl.....	12 50 @ 13 75	11 75 @ 12 37½
Prime, per bbl.....	8 50 @ 9 75	8 00 @ 9 50
BEEF—Round, per bbl.....	11 50 @ 12 00	11 00 @ 12 00
LARD, in bbls, per lb.....	8 @ 8	8¼ @ 8¼
BUTTER—Western, per lb.....	11 @ 16	11 @ 15
State, per lb.....	16 @ 22	15 @ 21
CHEESE.....	6 @ 8	5¼ @ 7¼
Eggs—Fresh, per dozen.....	19 @ 20	18 @ 17
Lined, per doz.....	15 @ 16	14 @ 16
POULTRY—Fowls, per lb.....	6 @ 9	5 @ 9
Geese, per lb.....	6 @ 8	6 @ 12
Ducks, per lb.....	6 @ 11	6 @ 9
Turkeys, per lb.....	30 @ 62	25 @ 50
Partridges, per pair.....	6 @ 10	6 @ 7
VENTSON, Carcasses, per b.....	5¼ @ 7¼	5¼ @ 7
Dried Apples, per lb.....	18 @ 20	18 @ 20
Dried Peaches, per lb.....	15 @ 16	13 @ 14
Dried Raspberries, per lb.....	2 00 @ 2 25	2 00 @ 2 25
POTATOES—Merced, p. bbl.....	1 50 @ 1 75	1 75 @ 1 88
Peanutblow, per bbl.....	1 25 @ 1 38	1 38 @ 1 50
Western Red, &c.—per bbl.....	1 50 @ 1 88	1 38 @ 1 50
Nova Scotia—per bush.....	2 00 @ 2 50	2 50 @ 3 25
Sweet Delaware, per bbl.....	1 00 @ 1 25	1 00 @ 1 12
ONIONS—Red, per bbl.....	1 25 @ 1 75	1 25 @ 1 00
White, per bbl.....	75 @ 1 00	75 @ 1 00
TURNIPS—Rutabaga, per bbl.....	2 00 @ 2 50	2 50 @ 3 00
SQUASH—Marrow, per bbl.....	2 00 @ 2 50	2 50 @ 3 00
APPLES—Common, per bbl.....	3 00 @ 4 00	3 00 @ 4 00
Apples—good, per bbl.....	8 00 @ 11 00	8 00 @ 11 00
Cranberries, per bbl.....	8 00 @ 11 00	8 00 @ 11 00

TRANSACTIONS AT THE NEW-YORK MARKETS.					
RECEIPTS.	Flour.	Wheat.	Corn.	Rye.	Barley.
25 days this month	272,000	61,500	43,200	22,550	63,000
25 days last month	705,000	3,150,000	2,351,000	393,975	269,000
SALES.	Flour.	Wheat.	Corn.	Rye.	Barley.
25 days this month	892,100	1,116,000	1,205,450	145,400	138,700
25 days last month	778,000	5,641,000	3,229,000	304,000	276,000

COMPARISON WITH SAME TIME LAST YEAR.					
RECEIPTS.	Flour.	Wheat.	Corn.	Rye.	Barley.
25 days this year	272,000	61,500	43,200	22,550	63,000
25 days last year	110,000	81,800	61,900	20,500	41,500
SALES.	Flour.	Wheat.	Corn.	Rye.	Barley.
25 days this year	392,100	1,116,000	1,205,450	145,400	138,700
25 days last year	341,200	1,631,500	1,532,000	17,000	58,500

Receipts in New-York during each of three years past.					
	Flour.	Wheat.	Corn.	Rye.	Barley.
1861	4,968,971	28,429,135	21,130,242	775,665	1,354,304
1860	3,110,346	28,938,314	12,883,850	1,000,405	3,947
1859	1,936,302	13,838,039	4,085,632	450	8,280
1858	3,191,322	3,815,092	3,068,622	394,491	1,527,400

Exports from New-York for each of three years past.					
	Flour.	Wheat.	Corn.	Rye.	Barley.
1861	3,110,346	28,938,314	12,883,850	1,000,405	3,947
1860	1,936,302	13,838,039	4,085,632	450	8,280
1859	3,191,322	3,815,092	3,068,622	394,491	1,527,400

Stock of Flour in New-York City, Jan. 1.			
	1860.	1861.	1862.
Western Canal Flour, bbls.....	681,876	569,800	447,056
Canadian Flour, bbls.....	17,130	10,200	11,100
Southern Flour, bbls.....	228,503	91,998	36,956
Total.....	927,509	671,998	495,112

Stock of Grain in New-York, Jan. 1.			
	1859.	1860.	1861.
Wheat, bush.....	1,211,312	1,915,388	2,535,741
Corn, bush.....	669,690	79,400	2,712,000
Rye, bush.....	43,500	30,500	26,400
Barley, bush.....	806,416	808,795	169,574
Oats, bush.....	860,200	1,576,100	494,790

Exports from New-York, from Jan. 1 to Jan. 15.			
	1862.	1861.	1860.
Flour, bbls.....	156,555	842,096	522,334
Wheat, bush.....	17,785	563,937	405,665

Receipts at Chicago during each of last four years.			
	1861.	1860.	1859.
Flour, bbls.....	1,583,067	700,006	742,012
Wheat, bush.....	18,147,181	14,568,429	8,184,746
Corn, bush.....	20,668,530	15,487,966	4,410,009
Oats, bush.....	1,448,444	2,029,906	1,813,048
Rye, bush.....	333,560	925,436	228,179
Barley, bush.....	461,647	623,005	662,137

Stock of Breadstuffs at Chicago, Jan. 1, 1862.			
	1862.	1861.	1860.
Flour, bbls.....	26,986	239,205	239,205
Wheat, bush.....	1,855,903	1,855,903	1,855,903
Corn, bush.....	1,568,536	1,568,536	1,568,536

Receipts at Albany (by Erie and Champlain Canals,) during each of three years past.			
	1861.	1860.	1859.
Flour, bbls.....	1,408,338	28,888,637	23,342,834
Wheat, bush.....	1,149,100	11,776,000	14,155,500
Corn, bush.....	600,311	5,110,534	2,492,217

Exports of Breadstuffs from Philadelphia, during each of the last six years.			
	1861.	1860.	1859.
Flour, bbls.....	362,452	31,672	2,054,988
Wheat, bush.....	295,137	49,357	811,991
Corn, bushels.....	172,944	44,454	54,434
Total, 1861.....	362,452	31,672	2,054,988
Total, 1860.....	295,137	49,357	811,991
Total, 1859.....	219,871	39,773	88,199
Total, 1858.....	198,867	48,572	190,400
Total, 1856.....	342,035	92,603	684,092

Receipts of Breadstuffs at Boston for December 1861, and total receipts for two years.			
	In Dec. 1861.	Total, 1861.	Total, 1860.
Flour, bbls.....	240,196	1,429,697	1,160,774
Flour, half-bbls.....	859	8,603	7,917
Corn, bushels.....	45,676	1,979,925	2,045,900
Corn, sacks.....	1,191	1,191	20,940
Wheat, bushels.....	15,650	29,388	30,135
Oats, bushels.....	177,950	1,047,345	1,467,611
Rye, bushels.....	2,100	33,156	33,156
Shorts, bushels.....	43,700	515,833	551,7



THE MAP ABOVE shows a portion of the Atlantic seaboard to which public attention is now (Jan. 20,) directed, more by guess-work than by any certain knowledge of the destination of the "Burnside Expedition." Fortress Monroe, and Norfolk, with adjacent points, are seen on the North. Sewell's Point runs up north of Norfolk, towards Fort Monroe, and defends the entrance to Norfolk. The great Inland seas or Sounds, Pamlico and Albemarle, are finely shown, with Roanoke Island between them. Also the Inlets from the ocean, and the Dismal Swamp Canal, connecting the waters of Norfolk with Albemarle Sound. The Atlantic & N. C. Railroad runs northwest from Newbern, to Goldsboro', on the railroad running South from Richmond, Va., to Charleston, S. C. Weldon, N. C., on the same line, is 88 miles North of Goldsboro', and 80 miles southwest of Norfolk. Plymouth, at the head of Albemarle Sound, is equally distant southeast from Weldon, and northeast from Goldsboro'. These explanations, with this map, in connection with a school map, will aid in understanding any movement that may occur in the region indicated.

PREMIUM LIST, For 1862---Vol. XXI.

Or Pay to Voluntary Agents who will attend to collecting names of new and old subscribers to the Agriculturist, and forwarding them to the Office.

Experience has proved that it is a benefit to the subscribers themselves, as well as to the Publisher, to have an Agent at every Post Office, to attend to collecting the names and subscriptions of old subscribers, and to present the advantages of the paper to those not yet acquainted with it. But to employ and commission a Special Agent in every neighborhood throughout the country, is out of the question. We therefore offer certain good articles, the value proportioned to the number of names sent in, and leave them open to every person disposed to attend to the business, in the locality where he or she may be known to be reliable. By giving the articles offered we can make the pay much larger than if in money, as we have facilities for getting the articles at low rates.

☞ In selecting articles for premiums, we have aimed to get such as are useful, and as have been most frequently called for by our readers. ☞ We wish it distinctly understood that these premiums are offered in good faith—no cheap, trashy, imperfect, poorly made, or second-hand thing, will be sent out, but each article offered, is the best of its kind, and every one will be selected by the publisher from the very best manufactured. They will be the best sold in the market at the prices named.

☞ We offer nothing for competition. Each premium is for a specified number of subscribers, and no one's remuneration will depend upon what other unknown persons are doing; every one knows just what he or she is working for.

☞ We make no distinction between new and old subscribers, but it is expected that every canvasser will not only gather up the names of old subscribers, but also secure a large number of new names.

☞ Every person collecting names for premiums, should send the names with the money as fast as obtained, so that the subscribers may begin to receive their papers; but if designed for premiums, two copies of each list of names should be sent—one of them marked at the top "For Premiums," and also with the name of the sender.

☞ The premiums are offered for subscribers for Volume XXI (1862), whenever received. Canvassers will have time for completing their lists, but the premium will be paid as soon as any club is made up—if duplicate lists are sent.

☞ Any person who has commenced sending in names at 80c. and finally fails to get the higher number of names, can fall back upon the smaller number, by remitting the 20 cents extra on each of the smaller number of names required.

☞ Clubs need not be all confined to one Post Office.

Table of Premiums for 1862.

Names of Premium Articles.

Names of Premium Articles.	Price of Premium	Names at 80 cts. each	Names at 50 cts. each
1—Clothes Wringer, No. 2	\$7 50	18	37
2—Clothes Wringer, No. 1	\$10 00	23	48
3—Sewing Machine, (Wheeler & Wilson)	\$45 00	90	48
4—Sewing Machine, (Wilcox & Gibbs)	\$35 00	69	130
5—Aneroid Barometer	\$7 50	19	98
6—Hydropult	\$12 00	30	44
7—Five Octave Melodeon (best)	\$75 00	125	237
8—1/2 Octave Melodeon (best)	\$60 00	104	182
9—Four Octave Melodeon (best)	\$45 00	90	130
10—New Cyclopaedia, 16 volumes	\$48 00	96	140
11—Worcester's Unabridged Dictionary	\$7 50	18	40
12—Five back Volumes Agriculturist, p.p.	\$5 60	16	30
13—Four do do do do	\$4 48	13	26
14—Three do do do do	\$3 36	10	20
15—Two do do do do	\$2 24	10	15
16—One do do do do	\$1 12	10	10
17—Winsor & Newton's Paints	\$2 50	20	20
18—Osborn & Hodgkinson's Paints	\$1 50	15	15
19—Hand Corn Sheller (best)	\$6 50	21	40
20—Straw and Hay Cutter (best)	\$8 00	24	48
21—Best Subsoil Plow (3-horse)	\$8 00	24	48
22—Various Books—See terms below			
23—Boy's Chest of Tools	\$8 00	18	36
24—Youth's Chest of Tools	\$13 00	26	60
25—Gentleman's Chest of Tools	\$30 00	48	80

DESCRIPTION OF THE PREMIUMS.—SEE REMARKS ABOVE.

Premiums. 2, 3.—Wringer Machine.

We place this first, for it is nearly new, and one of the most useful articles for every family. We had one of the first made, and have used it over a year with the highest satisfaction. It completely does away with the hard straining work required to wring out garments by hand. It does not twist and break the fibers of the clothes, but simply presses them between two elastic India-rubber rollers, which are moved by a crank, and whether large or small pieces, they come out dryer than when wrung by hand. The saving to garments would soon pay the cost of the implement, to say nothing of the saving of woman's labor. The machine is set upon the side of any tub; the garments drop out into a basket. A child can quickly wring out a tub full of clothes—No. 2, costing \$7.50, is just the thing for common family use. This we present for 18 subscribers, at \$1 each, (or 37 at the lowest club price of 80 cents each.)—No. 1, costing \$10, is adapted to larger families and Hotels. We will present it for 23 subscribers at \$1 each, (or 48 at 80 cts. each.)

Premium No. 4.—Sewing Machine.

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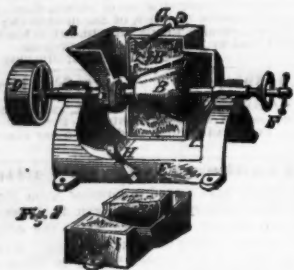
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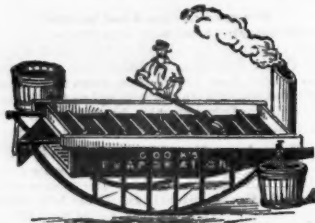
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[Any of the following books can be obtained at the office of the *Agriculturist* at the prices named, or they will be forwarded by mail, *post paid*, on receipt of the price. Other books not named in the list will be procured and sent to subscribers when desired, if the price be forwarded. All of these books may well be procured by any one making up a library. Those we esteem specially valuable, are marked with a *.]

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Please take notice that the office and sale of this Company's Poudrette is changed from Messrs. Griffing, Brother & Co., No. 60 Cortlandt-st., to No. 66 CORTLANDT-ST.

Other brands of what purports to be Poudrette are in market, put up in barrels to resemble this. Beware of frauds—buy that only which has the brand of the Lodi Manufacturing Co. Any other article is comparatively worthless.

We call the attention to the following experiences of practical farmers, in different sections of the country:

NORTH FENBROOK, Mass., Oct. 7, 1861.

James R. Dey, Esq., President of the Lodi Manufacturing Co.:

Dear Sir—The early autumnal frosts for several years past have seriously injured our corn crops, and rendered it necessary for farmers in this section to seek some fertilizer to give their crops an early start, in order to bring them to maturity in season to avoid that calamity. Having experimented with Guano, Superphosphate of Lime, &c., with indifferent success, in the Spring of 1860 I purchased four barrels of the Lodi Manufacturing Co.'s Poudrette, which I applied principally to my corn crop, with the most satisfactory results. This was the first Poudrette ever introduced into this vicinity. Last Spring I procured from your branch office in Boston about thirty barrels, the most of which I sold to my neighbors, who had witnessed the effect of my last year's trial, which, so far as has been heard from, has given universal satisfaction. To further test the efficacy of your Poudrette, this season I ploughed about two acres of light, sandy soil, which had lain in grass about six years, (the last crop of grass being very light.) This I planted with corn and potatoes, applying about four and a half barrels of Poudrette with no other manure, except a handful of ashes to each hill at the first hoeing, and from present appearances we shall have a better crop than on a field of like soil where we applied twenty-five loads of manure to the acre. Its effects on garden vegetables are equally apparent. I am, very respectfully, yours,
HORACE COLLAMORE.

MERRILL, Me., Oct. 11, 1861.

Lodi Manufacturing Co.:
Sir—I bought of your agents, Cross & Newell, two barrels of your Poudrette, and in using the first I got six of it and sold the other barrel. But the one that I used I tried the principal part on potatoes. I used about half a pint to the hill, and the yield was equal to those planted on manure at the rate of twenty loads to the acre. My neighbor, who bought the other barrel, says if he had bought five barrels more, he would have saved the price of twenty barrels.
Yours, &c.,
V. B. PAUL.

WALDO, Me., Oct. 12, 1861.

To the Lodi Manufacturing Co.:
Gentlemen—Last Spring I bought of Cross and Newell one barrel of your Poudrette as an experiment, but with very little faith in its utility. I put it on six rows of corn in different parts of the field, after manuring with barn-yard manure, in the usual way—at the second time hoeing. Where I put the Poudrette the corn was twice as large as the rest of the field, and this now is one-third heavier, and has ripened about eight days earlier. I think it is the very thing we want for raising corn in this country, and shall use it more extensively another year.
Yours, &c.,
WELLINGTON SHOREY.

SMYRNA, Del., Oct. 1, 1861.

Gentlemen—I had heard of the Poudrette manufactured by the Lodi Manufacturing Co., and thought I would try a small quantity on a lot of land intended for corn, and as I could not get it nearer than Philadelphia, I went and bought of the agent twenty barrels, and applied two barrels to the acre, dropping the corn and a handful of Poudrette in each hill. I left out a part of two rows, and put no Poudrette, to ascertain if there was any value in it, and noticed those two rows during the season; and where the Poudrette was used, the corn was decidedly the best, and I have no hesitation in saying it is a good manure for corn. I am certain I made from one-third to one-half more by using it.
Yours, respectfully,
JOHN G. BLACK.

CHESTER, Pa., Sept. 13, 1861.

To the Lodi Manufacturing Co.:
Gentlemen—I purchased this season of Messrs. Baker & Co., eleven barrels of Poudrette and one bag of Phosphate, which I put on my corn. I marked the place where I put the Phosphate, which, when started, seemed ahead, but now the corn where the Poudrette was on is much the best. Last year I used Allen & Needie's new Fertilizer, which did no good at all, as the corn done better without the manure, I think the Poudrette made by your Company the cheapest manure in use.
Yours, &c.,
A. R. PERKINS.

The Company's pamphlet, containing directions for its use, with other valuable information and the experiences of over one hundred farmers, will be sent free to any one applying for the same. Address,
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See Here!

Nearly Two Thousand persons have already secured one or more of the good premium articles noted on page 60. But the stock is yet unexhausted, and a thousand more may still each obtain some of the useful implements, books, etc., offered.—Please look over the various topics discussed in this paper. Including the recipes, there are more than Two Hundred separate items in this single February number. With such a paper to show, and talk about, it would seem to be not very difficult to fill up a Premium Club already started, or to get up an entirely new one, during this month, and thus obtain cheaply a Labor-Saving and Clothes-Saving Wringer, or a Sewing Machine for the wife; a Barometer, or Hydropult, or some good back Volumes, or a Corn Shelter, or a Straw Cutter, or Sub-Soil Plow, or Chest of Tools, or Good Books, for the husband; or a fine Melodeon for the daughter, or the School, or the Church; a Chest of Tools for the boys, to teach them to be "handy;" or a Great Dictionary, or the Splendid Cyclopaedia, or good Books, for the Family or for the Library of the Farmers' Club.—Not a thing is offered that is not really good and worth its price, and we take pleasure in presenting these things to those who circulate the *Agriculturist*, and thus benefit our list, and at the same time benefit themselves, and also those who are persuaded to read.

Worthy of Special Preservation.

Probably most subscribers preserve all the copies of the *Agriculturist*. Where this is not done regularly, we suggest that the present number will be worthy of special preservation for future reference. The summing up of the previous year's transactions in Breadstuffs given in the Market Review (p. 59), the statistics of the live stock markets, the numbers and prices; the weights and values of different parts of the animals, and modes of selling (p. 58); the fifty four separate recipes or directions for making Corn Bread and Corn Cake—these, and other items of information in the "Basket" and elsewhere which have cost us great labor to prepare and condense, will make this number particularly worthy of being kept. But this is only the twelfth part of a volume, and we hope and intend to make all numbers worth keeping.

The Postage on the *Agriculturist* is positively only Six Cents a Year.

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Notes.—The samples receiving premiums will be retained on our tables for the inspection of the public. All others will be subject to the direction of the exhibitors, at the close of the Exhibition. The *Agriculturist* having met with unprecedented success, even in these tumultuous times, we gladly set apart the above sums, as our own contribution for the purpose indicated. Probably several Associations will be prompted to make still larger offers. Chinese Sugar Cane was set down for premiums, but we see that abundant offers are already made by the various Societies. We shall therefore turn our attention to other fields of public improvement, of which future announcements will be made.

Seeds not Quite Ready.

As none of our Seeds will go South this Winter, we have not hurried their preparation as much as usual, preferring to wait until we can get all together (including those on the way from Europe,) before commencing to send any out. They will all be started in ample time to reach subscribers before they will need them to use. The mailing of the parcels will commence the last week in February. Those intending to apply for seeds should do so early in February. (See list and directions on page 35.)

American Agriculturist.

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